National Library of Canada
Canadian Theses Service
Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada
Services des thèses canadiennes

CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

THIS DISSERTATION HAS BEEN MICROFILMED EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVONS REÇUE

NL 339 (r. 86/01)

Canada

0-315-22869-5

National Library of Canada | Bibliothèque nationale du Canada

Canadian Theses Division | Division des thèses canadiennes

Ottawa, Canada
K1A 0N4

PERMISSION TO MICROFILM — AUTORISATION DE MICROFILMER

• Please print or type — Écrire en lettres moulées ou dactylographier

Full Name of Author — Nom complet de l'auteur

MADHAV P. MAINALI

Date of Birth — Date de naissance

9 August 1949

Country of Birth — Lieu de naissance

NEPAL

Permanent Address — Résidence fixe

RING-ROAD BALAJU
KATHMNDU
NEPAL

Title of Thesis — Titre de la thèse

ORGANIZATIONAL STRUCTURE AND CULTURAL CONTEXTS

University — Université

THE University of Alberta

Degree for which thesis was presented — Grade pour lequel cette thèse fut présentée

Ph. D.

Year this degree conferred — Année d'obtention de ce grade

1985

Name of Supervisor — Nom du directeur de thèse

Dr. E. MIKLOS

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

Date

September 12, 1985

Signature

Madhav Mainali

NL-91 (4/77)

THE UNIVERSITY OF ALBERTA

ORGANIZATIONAL STRUCTURE AND CULTURAL CONTEXTS

by

MADHAV P. MAINALI

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA ©

FALL 1985

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR MADHAV P. MAINALI

TITLE OF THESIS ORGANIZATIONAL STRUCTURE AND CULTURAL CONTEXTS

DEGREE FOR WHICH THESIS WAS PRESENTED DOCTOR OF PHILOSOPHY

YEAR THIS DEGREE GRANTED 1985

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(SIGNED) Madhav Mainali

PERMANENT ADDRESS:

Ring-Road Balaju

Kathmandu

NEPAL

DATED September 5, 1985

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled ORGANIZATIONAL STRUCTURE AND CULTURAL CONTEXTS submitted by MADHAV P. MAINALI in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY.

E. Mikelsons

Supervisor

Magnus

R Ewe

Alta Braaksma

Ranjan Ratnaraj

Claude Deblois

External Examiner

Date September 5, 1985

ABSTRACT

The primary purpose of this comparative study was to explore the similarities and dissimilarities in the organizational characteristics of two universities in different cultural contexts -- the University of Alberta (U of A) in Canada and Tribhuvan University (TU) in Nepal. A nomothetic approach of inquiry and analysis was applied. Comparisons were made in terms of clearly defined organizational and cultural variables. Structural centralization, formalization, satisfaction with structure and overall job satisfaction were identified as organizational variables. Culture was defined as meanings and symbols shared by individuals of a society. Such meanings are reflected in the beliefs, values and preferences of social groups. Respondents' value orientations -- the degrees of (a) conformity, (b) individualism and (c) tolerance for uncertainty -- in the two cultural contexts were identified as the operational indicators of shared cultures.

The study was guided by the assumption that a valid comparison could not be made without measuring identical constructs in both of the organizational contexts which were compared. To acquire a certain degree of assurance that similar characteristics of the organizations and cultures were measured in both the samples, (a) similar instruments were operationalized in the Nepalese and the Alberta settings, (b) the instruments were factor analysed to select identical scales which were used as the bases of comparison, and (c) identical techniques were used to analyse both sets of data.

Responses of 262 professors at the U of A and 207 professors at TU were obtained. A series of *t* tests and of analysis of variance were conducted to explore differences between the two universities and differences among faculties at each of the two universities. Correlation coefficients were used to examine interrelationships among the variables.

Results of the analysis indicated that the respondents in the two samples perceived the structure of their universities differently. Substantial differences were observed in respondents'

satisfaction and value orientations. The findings of the study indicated an inconsistency in the pattern of relationships among variables across the samples. While some variables demonstrated a similar relationship in both of the samples, others did not.

The findings of the study have implications for the selection of perspectives for cross-cultural research. An attempt was made to assess the extent to which the results supported either the culture-free or the culture-specific perspectives. The culture-free or universalistic approach assumes that organizations across nations or cultures are fundamentally similar and that a generalized theory can be applied universally. In contrast, the culture-specific or culturalistic perspective stands on the argument that cultures shape organizations in different contexts into distinct entities consisting of specific administrative characteristics. Such fundamentally different characteristics and processes cannot be analysed by the application of generalized theories.

Differences between the samples observed in this study provide support for the culture-specific theory. However, the universalists claim that such differences can be purely incidental and are not complete evidence either to support or to refute a theory. The culture-free model can be challenged if it is empirically demonstrated that organizational variables relate differently in two contexts. The results of this study revealed some cross-sample differences in relationships among variables. These differences seem to challenge the concept of stable relationship advanced by universalists. Such a conclusion must, however, be made with a certain degree of caution. Culture-free writers argue that differences could merely be the effect of dissimilar contingencies faced by the organizations that are compared.

ACKNOWLEDGEMENTS

The sincere efforts of many people have made this thesis possible. When I attempt to express my gratitude to these individuals, I realize how difficult it is to communicate my feelings adequately in words. I acknowledge those who have helped me with an expectation that they will sense my deep appreciation.

I am grateful to the members of my supervisory committee -- Dr. E Miklos, Dr. M. K. Bacchus, Dr. E. Ratsoy, Dr. L. Gue, Dr. T. Maguire -- and to the external examiner, Dr. C. Deblois. They provided needed guidance through constructive comments and suggestions. The Chairman of the thesis supervisory committee, Dr. Miklos, contributed immensely to the success of this study through his attention to detail, insight into the body of knowledge and positive criticism. His words of encouragement kept me motivated in my work at all times.

Gratitude is expressed also to Mrs. C. Prokop for her valuable assistance with the computer programs required for analysis of the data.

The generosity of the International Development Research Centre (IDRC), Ottawa, Canada, for the financial assistance provided during the doctoral program is acknowledged. I am deeply indebted to Mr. J. Allan Rix, Dr. P. Flores, Dr. S. Shaeffer and Dr. K. King who, in various ways, contributed towards the success of this endeavour.

The support of my wife, Bharati, has been particularly important during my studies; I give special thanks for her patience and understanding.

Table of Contents

Chapter — Page

I. INTRODUCTION 1

A. BACKGROUND OF THE STUDY 2

B. PROBLEM STATEMENT 5

C. SIGNIFICANCE OF THE STUDY 7

D. DEFINITION OF VARIABLES 8

Cultural Values 8

Organizational Structure 9

Satisfaction 9

E. DELIMITATIONS 9

F. LIMITATIONS 10

G. ASSUMPTIONS 11

H. ORGANIZATION OF THE THESIS 11

II. REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK 12

A. CONCEPTS OF ORGANIZATIONAL STRUCTURE 12

Structure as Framework or Interactive Process 13

New Perspective 13

Measurement of Organizational Structure 15

Perceptual Measures of Structure 15

Institutional Measures of Structure 17

Oganizational Assessment Model 19

Implications for the Present Study 19

B. JOB SATISFACTION: DEVELOPMENT OF CONCEPT 20

Hierarchy of Needs: Maslow 20

Motivation-Hygiene Theory: Herzberg 21

Current Theories 22
Satisfaction: Determinant or Outcome 24
Relationship Between Satisfaction and Structure 24
Relationship Between Satisfaction and Centralization 24
Relationship Between Satisfaction and Formalization 25
Implications for the Present Study 26
C. PERSPECTIVES IN CROSS CULTURAL RESEARCH 27
Organizations Free of Culture 27
Logic of Convergence and the Contingency Approach 28
Organization Influenced by Culture 29
Methodological Propositions 31
Arguments for Universal Model 32
Argument for The Measurement of Social Particularities 34
D. CONCEPTUAL FRAMEWORK OF THE STUDY 35
Reconciliation Between the Two Perspectives 37
Selection of the Variables of Culture 38
Selection of Inquiry Paradigm 40
E. SUMMARY 42
III. RESEARCH METHODOLOGY 44
A. INSTRUMENTATION 44
Section I 45
Section II 46
Section III 47
Section IV 48
Section V 49
Pilot-test of Questionnaire 50
B. VALIDITY 51

C. RELIABILITY 52

D. DATA COLLECTION AND ANALYSIS 53

Questionnaire Distribution and Collection 53

Treatment of Data 54

E. PROFILE OF THE RESPONDENTS 55

Age 55

Work Experience in Respective Universities 55

Faculty 58

Faculty Position 58

F. SUMMARY 58

IV. DEFINING SCALES FOR ORGANIZATIONAL AND CULTURAL VARIABLES 62

A. ANALYTICAL PROCEDURES 62

B. RESULTS OF ANALYSIS OF ORGANIZATIONAL VARIABLES 64

Centralization of Decision Making Authority 64

Formalization of Organizational Activities 70

Satisfaction with Organizational Structure 74

Overall Satisfaction with Job 80

C. RESULTS OF ANALYSIS OF CULTURAL VARIABLES 80

D. SCALES FOR THE MEASUREMENT OF VARIABLES 92

E. SUMMARY 93

V. RESULTS OF DATA ANALYSIS 95

A. ORGANIZATIONAL AND CULTURAL DIFFERENCES 95

Cross-Sample Differences on Organizational Structure 96

Differences in Satisfaction Across Samples 104

Value Related Differences Across Samples 109

Summary of Differences Between the Two Samples 115

B. DIFFERENCES ACROSS FACULTIES IN A UNIVERSITY 117

C. INTERRELATIONSHIPS AMONG VARIABLES 122

Correlational Analysis of Variables Across Samples 123

Exploration of Relationships Among Variables by the Analysis Group Responses 127

D. SUMMARY 146

VI. DISCUSSION OF THE FINDINGS 148

A. THEMES EMERGING FROM THE FINDINGS 148

Differences in Structure, Satisfaction and Values 148

Relationships Among Variables 155

B. THEORETICAL IMPLICATIONS OF RESULTS 159

Theoretical Interpretation of Organizational Differences 161

Priority for the Investigation of Relationships Among Variables 164

C. ISSUES RELATED TO METHODOLOGY 167

Measurement of Values 167

Comparable Samples and Common Instrument 169

D. SUMMARY 172

VII. SUMMARY, CONCLUSIONS, AND IMPLICATIONS 175

A. SUMMARY 175

Background and Purposes of the Study 175

Conceptual Framework 177

Methodology 179

Scales of Measurement 180

Findings 181

Discussion 183

B. CONCLUSIONS 184

C. IMPLICATIONS 186

REFERENCES 188
APPENDIX A 203
APPENDIX B 213
APPENDIX C 223
APPENDIX D 226

List of Tables

Table		Page
2.1	Hage's Model of Organizational Structure	16
3.1	Distribution of Alberta and Nepalese Respondents by Age	56
3.2	Distribution of Alberta and Nepalese Respondents by Years of Experience	57
3.3	Distribution of Alberta and Nepalese Respondents by Faculty	59
3.4	Distribution of Alberta and Nepalese Respondents by Position	60
4.1	Factor Matrices of Centralization items: Results from Alberta and Nepalese Samples	65
4.2	Factor Matrices of Selected Centralization Items: Results from Alberta and Nepalese Samples	68
4.3	Definition of Factors of Selected Centralization Items	69
4.4	Factor Matrices of Formalization Items: Results from Alberta and Nepalese Samples	71
4.5	Transformed Factor Matrix of Formalization Items: Results from Nepalese Samples	72
4.6	Definition of Factors of Selected Formalization Items	73
4.7	Factor Matrices of Satisfaction with Structure Items: Results from Alberta and Nepalese Samples	75
4.8	Factor Matrices of Selected Satisfaction with Structure Items: Results from Alberta and Nepalese Samples	77
4.9	Transformed Factor Matrix of Selected Satisfaction with Structure Items: Results from Alberta Sample	78

4.10 Definition of Factors of Selected Satisfaction with Structure Items 79

4.11 Factor Matrices of Value Statement Items: Results from Alberta and Nepalese Samples 82

4.12 Factor Matrices of Selected Value statement Items Results from Alberta and Nepalese Samples 87

4.13 Transformed Factor Matrix of Value Items: Results from Nepalese Sample 90

4.14 Definition of Factors of Selected Value Statement Items 91

5.1 Cross-Sample Differences in the Level of Centralization of Decision Making Authority Measured in Terms of Three Factors of Selected Decisions 97

5.2 Differences in Centralization of Decision Making Authority Between Alberta and Nepalese Samples 99

5.3 Cross-Sample Differences in the Level of Formalization Measured in Terms of Three Related Factors 102

5.4 Differences in Formalization of Organizational Activities Between Alberta and Nepalese Samples 103

5.5 Cross-Sample Differences in the Level of Satisfaction with Structure Measured in Terms of Three Related Factors 105

5.6 Differences in Satisfaction with University Structure Between Alberta and Nepalese Professors 106

5.7 Cross-Sample Differences in Overall Job Satisfaction 108

5.8 Cross-Sample Differences in Conformity 110

5.9 Cross-Sample Differences in Individualism 112

5.10 Cross-Sample Differences in Tolerance for Uncertainty 114

5.11 Differences in Measures of Organization and Culture Related Variables 116

5.12 Results of One-Way Analysis of Variance of Centralization of Decision Making Authority Classified by University Faculties in Alberta and Nepalese Samples 119

5.13 Results of One-Way Analysis of Variance of Satisfaction with Structure Classified by University Faculties in Alberta and Nepalese Samples 120

5.14 Results of One-Way Analysis of Variance of Overall Job Satisfaction Classified by University Faculties in Alberta and Nepalese Samples 121

5.15 Relationship Among Organization and Culture Related Variables: Results from Alberta and Nepalese Samples 124

5.16 Relationship Among Organization and Culture Related Variables: Results from Alberta and Nepalese Samples; Correlation Values that are .3 or Greater 126

5.17 Two Groups of Respondents' Perception of Centralization Measured in Relation to Conformity 129

5.18 Two Groups of Respondents' Perception of Formalization Measured in Relation to Their Individualistic Orientation 131

5.19 Two Groups of Respondents' Perception of Formalization Measured in Relation to Their Tolerance for Uncertainty 133

5.20 Four Groups of Respondents' Perception of Formalization Measured in Relation to Their Conformity and Tolerance for Uncertainty 136

5.21 Four Groups of Respondents' Perception of Formalization Measured in Relation to Their Tolerance for Uncertainty and Individualism 139

5.22 Mean Satisfaction with Structure of Four Groups of Respondents Measured in Relation to their Perception of Centralization and Formalization 142

5.23 Mean Job Satisfaction of Four Groups of Respondents Measured in Relation to Their Perception of Centralization and Formalization 145

D.1 Results of One-Way Analysis of Variance of Conformity Classified by University Faculties in Alberta and Nepalese Samples 227

D.2 Results of One-Way Analysis of Variance of Individualism Classified by University Faculties in Alberta and Nepalese Samples 228

D.3 Results of One-Way Analysis of Variance of Tolerance for Uncertainty Classified by University Faculties in Alberta and Nepalese Samples 229

D.4 Results of One-Way Analysis of Variance of Formalization Classified by University Faculties in Alberta and Nepales Samples 230

Chapter I

INTRODUCTION

Most studies of organizational structure and dynamics are, to a large extent, confined to particular societies. Organizational concepts developed by Woodward (1965) and Pugh et al. (1968, 1969), for instance, are primarily based on inferences drawn from investigations of British organizations. The analyses of Etzioni (1961), Blau (1965, 1974), Hall (1963, 1982) and Hage (1965, 1980), are limited in their focus to North American organizations. Compared with the total number of studies conducted within a particular cultural context, relatively few researchers have analysed organizations across nations or cultures. Adler (1983a:10) reviewed over eleven thousand articles published in twenty-four management journals between 1970 and 1980. She found that approximately five percent of the studies which were reported compared or analysed organizations across nations and cultures.

From the broader context of scientific development, Kuhn (1970) maintained that growing internationalism compels researchers to develop a paradigm that can encompass the diversity demanded by a global perspective. Similarly, in the field of management, Lammers and Hickson (1979:5) suggested that a large number of organizations across nations or cultures should be compared "...to arrive at generalizations concerning the relationships between characteristics of the organizational whole." In recent years, a growing realization of the need for such comparative analysis has encouraged a number of researchers to investigate organizations in cross-cultural settings.

A search of Dissertation Abstracts International, Educational Index, and the Educational Resources Information Center (ERIC) revealed that only a few studies analysed education organizations that are located in different cultural settings. Educational system cannot function in isolation from each other. The educational administrators of various

countries constantly seek information regarding management practices applied in other countries and the effect of such practicies on organizational effectiveness. There are two main reasons for this interest. First, experiences in one organization can be useful in other organizations; direct experience is, by no means, the only way of learning. Second, a system can maintain its effectiveness if the management is aware of its strength and weaknesses. One way to increase such awareness is to compare the administrative practices applied in one system with those of systems in different cultural contexts.

This study was initiated with the primary objective of exploring some of the similarities and differences in the organizational characteristics of universities which are located in different cultural environments. In order to achieve this objective, Tribhuvan University in Nepal and the University of Alberta in Canada were selected for comparison. The focus of the comparison was the dimensions of organizational structure and members' satisfaction with structure. In addition, the relationships between the characteristics of the two organizations and culture were also explored.

A. BACKGROUND OF THE STUDY

As has been described above, this study was directed at exploring similarities and differences in the organizational characteristics of the University of Alberta and Tribhuvan University. These universities have developed within distinct social and historical contexts. Tribhuvan University (TU) of Nepal, which consists of different campuses in various parts of the nation, was established in 1959. As a consequence of a period of rapid growth, by 1984 over thirty-five thousand students were enrolled in the institution. The University Act of 1971 recognized Tribhuvan University as a self-governing organization. In accordance with the act, TU is governed by a fifty member University Council. The members of the council are the representatives of the university administration, the faculties, businessmen, donors, students, the Ministry of Education and the Ministry of Finance of the Government of Nepal. While the University Council is ultimately responsible for the effective operation of the university, the

Technical Executive Committee governs the administrative and academic activities of the university in consultation with concerned Deans and Campus-Chiefs. As the chief administrators of TU, the Vice-Chancellor, Rector and Registrar comprise the Technical Executive Committee. The Rector's responsibilities are similar to those of the Vice-President of the University of Alberta who administers the academic affairs of the university. The Registrar of TU assists the Vice-Chancellor in matters of general administration, accounts, personnel administration, records and examinations.

The University of Alberta (U of A) is one of the largest universities in Canada in terms of the number of academic staff and students. The history of the university can be traced back to 1906 when the first legislative assembly of the Province (Alberta) passed legislation providing for a provincial university. In 1908 forty-five students were enrolled. The number of full-time and part-time students grew to an estimated thirty thousand by 1984. University education in Canada falls within the jurisdiction of the provinces. Under the University Act, the Minister of Advanced Education of the Government of Alberta administers all universities located in the province. The Board of Governors is the central governing body with responsibility for the conduct, management and control of the university. The membership of the Board includes representatives of the community, the university administration, the senate, faculties and students. The General Faculties Council is the senior governing body with respect to all academic matters.

A close examination of the two universities reveals many similarities. Both are self-governing institutions which organize research and teaching activities in areas such as the basic and applied sciences, agriculture, forestry, business, arts and humanities, education, medicine and engineering. The administration of both universities is carried out by committees or councils functioning at different levels of the organizational hierarchy, such as, the Board of Governors and General Faculties Council at the U of A or the University Council and Technical Executive Committee at TU. In spite of these similarities, there are indications of important dissimilarities in management practices.

To develop a basic understanding of the administrative design and the management practices of TU and the U of A, policy papers, reports of program evaluations and other related documents were reviewed. The information gathered in this process indicated that in the past ten years TU adopted a policy to centralize the decision-making authority in a few selected units that function at the central administrative level (i.e., Vice-Chancellor's Office) of the university. One recent example of such a policy is the rearrangement of the university examinations. In 1980 Prasad, the then Vice-Chancellor of TU, announced a policy to organize examinations through a newly established unit known as the Office of the Controller of Examinations. Previously, examinations were the responsibility of the individual campuses and were coordinated by the offices of deans. Under a similar policy, a unit of the Vice-Chancellor's office was given the responsibility to supervise (not to coordinate) the activities of the autonomous colleges which were affiliated with TU. The purpose of the supervision was to maintain uniform academic standards. Shrestha (1980:92), the then Dean of the Faculty of Education, observed that "The centralization of power in the Central Office affected the efficient operation of the TU negatively."

Another prominent issue relates to the satisfaction of professors. The documents released from the Professors' Association, Kathmandu, show that members' satisfaction with the way the university is administered and their satisfaction with job conditions were the matters most frequently raised in the meetings organized by the association. In contrast, available literature shows that structural centralization and satisfaction were not frequently discussed issues at the U of A. While the issues relating to university structure and faculty satisfaction were usually raised together at TU, neither of them seemed to be the matters of major concern at the U of A. These observations provide opportunities for raising researchable questions.

The above discussion implies that the organizational characteristics of the two universities have some similarities as well as dissimilarities. Kelley and Worthley (1981:164) stated that most of the comparative research undertaken, thus far, was concerned with the

identification and description of existing differences among organizations. The art of organizational comparison, however, ". . . consists of an effort to detect both similarities and/or dissimilaritities between the units under consideration" (Lammers and Hickson,1979:3). Those who attempt to identify characteristic dissimilarities between organizations located in different national or cultural settings tend to adopt a methodology distinct from those motivated to explore similarities. Lammers and Hickson (1979:3) found two contrasting objectives espoused by the two above approaches. They (1979:4) further maintained that there are studies directed at discerning 'genotypical' likeness in the characteristics of two or more organizations. Others, however, emphasize the exploration of cross-cultural differences in the characteristics of organizations.

Some researchers (e.g., Roberts:1970, Child:1981, Bhagat and McQuaid:1982, Berry:1980, Lammers and Hickson:1979) seem to agree that a comparative analysis, which is open to consideration of similarities as well as dissimilarities between organizations, carries greater potential for making a substantive contribution to the existing body of knowledge. A comparative analysis of both similarities and dissimilarities was the central focus of this study.

B. PROBLEM STATEMENT

Based on the preceding considerations, two organizations of higher learning -- the University of Alberta in Canada and Tribhuvan University in Nepal -- were compared in terms of their organizational structure, and their members' cultural orientations and satisfaction. The major research problem of the study may be stated in the form of the following question:

> What similarities and dissimilarities are there in the organizational characteristics of two universities in different cultural contexts ?

A number of specific questions were generated to guide the research:

1. What are the similarities and differences between academic staff members of Tribhuvan University, Nepal, and the University of Alberta, Canada, on perceptions of organizational structure, satisfaction and cultural values ?

2. What are the similarities and differences between faculties at the Nepalese university and at the Canadian university on the variables of organizational structure, member satisfaction and cultural values ?
3. What are the relationships among the variables of organizational structure, satisfaction and cultural values at the Nepalese university and at the Canadian university ?
4. What are the similarities and differences between the Canadian and the Nepalese universities in terms of relationships among structure, member satisfaction and cultural values ?

A series of analyses was conducted to explore answers to these research questions. The results of the analyses have implications for perspectives on cross-cultural research. A further attempt was made to explore the extent to which the results of the analyses supported either the culture-free or culture-specific models. The intention was to examine whether there was empirical support in the results of this study for either of the two dominant perspectives in comparative research.

The culture-free (or universalistic) perspective assumes that organizations are constructed in a rational way and that the rational construct of organizations is unaffected by cultural forces. Therefore, regardless of the cultural and social environments that surround them, organizations are fundamentally similar and function according to a universal pattern. A generalized theory of organization, which is abstracted above and beyond cultural particularities of nations and regions, can be applied universally.

Those who are guided by culture-specific (or culturalistic) perspective of comparative research, do not view organizations as a product of rational human action. Culturalists argue that specific-cultures play a vital role in the development of different administrative practices in organizations. Such fundamentally different practices cannot be analysed by the application of a generalized theory.

C. SIGNIFICANCE OF THE STUDY

Since one of the objectives of the study was to analyse empirically the fundamental premises of the two perspectives of comparative research, the results of the study have potential for making contributions to the development of theoretical knowledge.

This study attempted to explore culture as a factor of organizational environment. Moreover, the relationships between the characteristics of university organizations (e.g., structure) and the dimensions of culture were investigated across organizational and national systems. Such cross-level investigation (i.e., exploration of organizational practices across nations and cultures) helps to develop an understanding of the functions of complex organizations.

The cross cultural study of organizations provides an empirical basis for determining whether or not the general cultural distinctions found in the literature lead to observed differences in organizational behavior. Redding and Martyn-Johns (1979:104) stated: " we proceed to examine . . . ways of thinking (across cultures) and look at their effect on managerial behavior. The aim is to indicate cross-cultural differences in ways of seeing reality and the inevitable differences in behavior which results." Furthermore, the study of this nature identifies differences or similarities that are large enough and theoretically meaningful enough to warrant additional work. England and Negandhi (1979:178) stated, "It is only those differences that merit the painstaking effort required to show that they are 'culturally or environmentally determined' differences and to trace these elements of culture or environment that seem to produce them." In addition, cross cultural research identifies practices and relationships that can be transferred from one culture to another as well as those which cannot be transferred.

In the field of educational administration, very few attempts have been made to compare universities which have developed in markedly different cultural contexts. This study provides a useful basis for further studies in comparative educational administration. From a practical perspective, a comparative understanding of organizational structure, job satisfaction

and members' value orientations in these two universities may provide useful suggestions for future improvements in organizational design.

D. DEFINITION OF VARIABLES

As the research questions indicate, three different sets of variables were operationalized which related to (1) cultural values, (2) organizational structure, and (3) satisfaction. These variables formed the basis of the comparative analysis conducted in the study. To develop the operational indicators, each of these variables was defined as follows.

Cultural Values

According to a commonly accepted definition, culture consists of symbols and meanings shared by individuals of a society; culture is reflected in societal values (Keesing:1974, Child:1981). In this study, the value orientations of respondents were investigated as an approach to analyzing culture. Initially (a) respect for authority, (b) individualism and (c) tolerance for uncertainty were delineated as three variables of value orientations. They were defined as follows:

1. Respect for authority refers to the extent to which individuals are willing to accept the established social standards, authority and group consensus within their family, workplace and society.
2. Individualism refers to the extent to which individuals believe in taking care of themselves and their personal objectives.
3. Tolerance for uncertainty refers to the extent to which people are tolerant of ambiguous situations and their tendency not to avoid such situations.

The work of Altemayer (1981), Bales and Couch (1969) and Hofstede (1980b) formed the basis upon which the above definitions of respect for authority, individualism and tolerance for uncertainty stand. During data analysis, these definitions were reexamined by a factor analysis of the items developed to measure the value orientations of the respondents.

Organizational Structure

Centralization of decision making authority and formalization of organizational activities were identified as variables of organizational structure.

1. Centralization refers to the locus of decision making authority within the levels of organizational hierarchy of the universities. Van de Ven (1976:159) used a similar definition in his study of structural variations within organizations. The degree of decisions making authority exercised at different levels of organization is a frequently used measure of centralization (Hage and Aiken:1967, Blau and Schoenherr:1971).
2. Formalization of organizational activities refers to the extent to which rules, policies and procedures govern the work related activities of organizational members.

Satisfaction

Two major dimensions of satisfaction were included in the study: (1) satisfaction with structure, and (2) overall job satisfaction.

1. Satisfaction with structure refers to the extent to which the individuals reacted positively or negatively to the level of structural centralization and formalization in the organization where they worked.
2. Overall job satisfaction refers to the extent to which individuals react positively or negatively to the overall conditions in their work place.

E. DELIMITATIONS

In both samples of this study, university professors were asked to respond to the questionnaire that was the main source of data. Other members of the universities, such as teaching and research support personnel, and the administrative staffs were excluded from the samples.

The meaning implied by the term culture was delimited to the transmitted and created content and pattern of values. In other words, while there are a number of complementary

ways (or indicators) to explore culture, only value orientations were analysed to investigate the culture shared by particular groups of individuals. In addition, only limited dimensions of value orientations were explored. Similarly, organizational structure was measured in terms of its two variables, centralization and formalization. Other dimensions of structure were not considered. Since two variables of structure were included in the analysis, the relationship of satisfaction to structure was delimited to structural centralization and formalization. The measurement of job satisfaction was also delimited to respondents' overall satisfaction with their work and with the conditions in which they worked. Other factors of job satisfaction were not considered in the analysis.

F. LIMITATIONS

The extent of the generalizability of the findings is the primary limitation of this study. The findings do not represent Canadian and Nepalese organizations of higher learning other than the two universities which were included in the samples. Responses to questionnaire items served as the source of data.

An attempt to measure cultural values by operationalizing questionnaire items has always been a matter of debate, and it is likely to remain so in the future. Furthermore, respondents' perceptions of structural centralization and formalization, their satisfaction and value orientation were not measured at different points in time. In other words, inferences of the study were not based on longitudinal data. The findings, therefore, represent one particular time and one set of circumstances. These limitations should not have substantially affected the measurement of relationships between variables because the responses concerning all variables were gathered at one point in time.

Researchers are in disagreement on the question of how accurately organizational structure can be measured utilizing respondents' perceptions as the sole source of data. In addition, the cause-effect relationship between variables was not analysed. This is also a limitation of the study.

G. ASSUMPTIONS

A number of assumptions were posited in order to carry out the study.

1. Data gathered by questionnaire were adequate to pursue the research in the manner outlined.
2. The respondents of this study could provide the data necessary for the desired analysis.
3. The structure of organizations can be measured by the use of a questionnaire.
4. Individuals' value orientations, job satisfaction and satisfaction with structure can be measured by means of a questionnaire.
5. The respondents provided accurate responses to the questionnaire which could, therefore, be used as valid indicators of their perception.

H. ORGANIZATION OF THE THESIS

The thesis is presented in seven chapters. The content of this chapter presents the background to the study with remarks concerning the purpose, significance, delimitations, limitations and assumptions. The variables included in the study are also defined. The literature on organizational structure, job satisfaction and cross-cultural research is reviewed in Chapter II. This chapter also presents the conceptual framework for the study. Chapter III contains the description of the procedures applied in the development of the research instrument, the reliability and validity of the instrument, the methods used in data collection and the analysis of data, and a demographic profile of the Canadian and Nepalese respondents. Chapter IV and Chapter V include the results of the factor analysis and the findings of the analysis of data, respectively. Chapter VI comprises a discussion of the findings and conclusions drawn from the data analysis. The final chapter summarizes the thesis and presents the conclusions and implications of the study.

Chapter II

REVIEW OF LITERATURE AND CONCEPTUAL FRAMEWORK

Three broad bodies of literature, namely, organizational structure, satisfaction, and perspectives on cross-cultural research were reviewed. Each of these bodies of literature had implications for the conceptual framework of the study. This chapter is divided into four major parts. The first part deals with the concept of organizational structure and four different models that are commonly applied in the measurement of structure. The second part of the chapter contains reviews of the theories of job satisfaction and of the research on the relationship between job satisfaction and structure. Two contrasting perspectives on cross-cultural research and their methodological propositions are described in the third part. The chapter concludes with the conceptual framework of the study.

A. CONCEPTS OF ORGANIZATIONAL STRUCTURE

Weber's concept of ideal bureaucracy forms the basis for what is currently defined as organizational structure. Relying heavily on formally instituted aspects of organizations, Weber listed the elements of bureaucracy that contribute to effective administrative functioning. In his analysis, possible dysfunctions of these elements, as well as conflicts arising from unofficial elements of organizations remain largely unexplained. The works of modern writers such as Blau (1974), Giddens (1976, 1979), Hage (1965, 1980), Hall (1963, 1982), Mintzberg (1979, 1980) Murphy et al. (1975), Perrow (1972), Pugh et al. (1963, 1968), Ranson et al. (1980) and Scott (1981) have expanded the linear concept of bureaucracy into a multidimensional conceptualization of organizational structure. Nevertheless, the study of structure still revolves around Weber's original concepts.

On the basis of their review of the literature, Ranson, Hinings, and Greenwood (1980:2) concluded that organizational structure is understood primarily in two different perspectives. The Neo-Weberian theorists defined structure as the "prescribed framework" of the organization. For them, structure is a formal configuration of roles and procedures. However, the natural systems theorists described structure as an "interactive process" that occurs in the system and results in visible patterns.

Structure as Framework or Interactive Process

Those who view structure as a prescribed framework define organizational structure as a construct of four dimensions, namely, acquired knowledge, differentiated positions, prescribed authority, and formulated rules and procedures. The concept of "prescribed framework" has been criticized as an incomplete notion, because it reflected a formal superficial portrait of organizational activities. The critics claim that a fundamental understanding of organizational structure can be obtained by examining the informal interactive process within organizations. For writers like Zimmerman (1971), authority, rules and procedures, as the dimensions of structure, are not prescribed. They are rather an accomplishment of individuals. Blau (1974:14) argued that the concepts of prescribed framework and interactive process are incompatible with each other. This incompatibility, thus, can be a source of definitional ambiguity.

New Perspective

Ranson et al. (1980) disagreed with Blau and claimed that the concepts of framework and interaction are complementary to each other. They suggested (1980:3) that structure should be conceived as "a complex medium of control" that is "constituted and constitutive." This medium of control is continually remolded according to the power relationships among organizational members. Therefore, a control mechanism, in effect, is "produced and recreated in interaction and yet shapes that interaction" (Ranson et al.,1980:3). In a different fashion

Mintzberg (1980:324) arrived at a similar conclusion. He divided the structure of organization into five basic parts. His concept of "organizational structuring", then, focuses first on the division of labor (or task) among these organizational parts, and second, on the coordination of tasks. The "coordination mechanism", as Mintzberg (1980:324) asserted, functions through "mutual adjustment." In other words, individuals coordinate their own work by communicating informally with each other.

The notion of constituted and constitutive structure is drawn from Giddens' (1976, 1979) model known as the duality of social structure. To explain his concept of duality of structure, Giddens (1976:121) wrote, " . . . social structures are both constituted by human agency, and yet at the same time are the very medium of this constitution." A further attempt was made to define the concept. Giddens (1979:69) maintained that ". . . .the structural properties of social systems are both the medium and the outcome of the practices that constitute those systems." In a different fashion than the one adopted by Ranson et al.(1980), Giddens (1976:122, 1979:64) listed signification, domination and legitimation as three analytically separable dimensions of structural framework together with three dimensions of interaction, i.e. communication, power and morality/sanction. These two sets of dimensions of structure and interaction as Giddens claimed, are mediated by a set of three modalities, i.e. interpretive scheme, facility and norm. In order to explain the implications of Giddens' thesis for organizational research, Willmott (1981:472) stated that by employing Giddens' conceptual framework, the reproduction of organizational reality can be analysed in terms of interlocking modalities comprising interpretive scheme (e.g., hierarcy), facilities (e.g., rules and resources) and norms (e.g., achievement ethics and contractual obligations).

To summarize, the above approaches provide an insight that organizational structure is formed of something more than formal dimensions. If this is so, what variables or dimensions are currently considered while measuring organizational structure? Are these considerations enough to draw a complete picture of structure? With these questions in mind, this review attempts to analyze the conceptual and methodological framework of some widely used models

of structural measurement.

Measurement of Organizational Structure

Early empirical research typically compared the functioning of organizations with the descriptions of ideal-type bureaucracy. Since Weber listed only the intended and functional characteristics of bureaucracy, there was enough room to come up with a long list of unintended or dysfunctional consequences. Most of the research of the 1950s, and, to some extent, of the early 1960s followed an approach of explaining functional and dysfunctional consequences of bureaucracy.

A striking deficiency of early studies is their inability to analyze bureaucracy as a variable or combination of variables. They analyzed organizations as to whether they were or were not an ideal bureaucracy, instead of finding out if they were more or less bureaucratic. Hall (1963:33) contended that "bureaucracy is a condition that exists along a continuum, rather than being a condition that is either present or absent." This realization was a breakthrough in the study of organizational structure. With this emerged two distinct methods of measurement known as the perceptual and the institutional approach.

Perceptual Measures of Structure

Methodologically, Hall's (1963) approach to measuring bureaucracy, Hage's (1965) Axiomatic model of organizational analysis and Perrow's (1970) approach to technology and structure measurement rely on a combination of interview and questionnaire data from the members of organizations. This method of information collection is labelled as the "perceptual approach" by Payne and Pugh(1976:1130). Hall constructed six scales for the measurement of six dimensions or elements of bureaucracy, i.e. hierarchy of authority, division of labor, system of rules, systems of procedures, impersonality and technical competence. Hage (1965) thoroughly revised the model developed by Hall. In his axiomatic theory of organizational analysis, Hage (1965) identified four variables known as organizational means and four

Table 2.1

Hage's Model of Organizational Structure

Original Concepts	Basic Theoretical Dimensions	General Variables	A General Theoretical Definition of Basic Dimensions
Weber's knowledge-based authority and division of labor, and Thompson's proliferation of occupational specialities	Knowledge	Complexity	Distribution of knowledge among organizational positions
Weber's hierarchy of authority	Power	Centralization	Distribution of power among organizational positions
Barnard's pathologies of status systems	Reward	Stratification	Distribution of rewards among organizational positions
Weber's concept of bureaucratic rules	Control mechanism	Formalization	Distribution of discretionary power among organizational positions and professional latitude

Note: The table is an attempt to summarize the premises upon which Hage's model of organizational structure rests. This is drawn from Hage's works (1965, 1972, 1980).

variables known as organizational ends. The organizational means variables are presented in Table 2.1. Adaptiveness, effectiveness, efficiency and satisfaction are the variables of organizational ends. In Table 2.1, an attempt is made to summarize the theoretical definitions of the variables of structure and the original concepts which form the basis of these definitions.

As Table 2.1 shows, Hage (1965, 1972, 1980) used the writings of Weber, Barnard, and Thompson to define the four variables of structure, i.e., complexity, centralization, stratification and formalization. Knowledge, power, rewards and control mechanism were identified as the fundamental dimensions of these variables. Once the variables of structure were identified and basic dimensions defined, Hage (1965:294, 1980:33-36) developed operational indicators of the variables to apply them in actual measurement.

Application of the Axiomatic Model in Education

Based on Hage's conceptual framework, Bishop and George (1973) developed the Structural Properties Questionnaire (SPQ), an instrument for the analysis of elementary and secondary school structure. SPQ can be seen as a comprehensive instrument because it has undergone a series of revisions to incorporate new dimensions identified by research. Miskel et al. (1979), Savage (1981) and Scott (1980) utilized SPQ in their studies of educational organizations. The model developed by Hage and consequently the SPQ revised by Murphy, Bishop and George (1975) provided the conceptual basis for the development of the instrument used in this study.

Institutional Measures of Structure

Contrary to the distinctive data gathering approach adopted by Hall and Hage, the studies which operationalized the Aston Model of organizational structure (e.g. Pugh et al.: 1968, Child:1972, Holdaway et al.:1975 and Hinings and Lee :1976) applied a different method of data collection. In the process of collecting data researchers rely on direct information obtained from documents reflecting the configuration of organizational positions and from

information furnished by institutional spokesmen. To exemplify the types of inferences that may emerge in this approach, Pennings (1973:688) maintained, "If the organizational charts of different organizations reveal different numbers of authority levels, then different degrees of centralization may be inferred." Pennings described this method of data collection and analysis as the "institutional approach."

Hage and the researchers in the Aston Studies adopted almost similar conceptualizations while delineating the variables of organizational structure and the operational definitions of variables applied for actual measurement. Pugh et al. (1968:66) accepted that the "conceptual framework upon which [the Aston] studies are based . . . accords closely . . . with concepts from which Hage derives his Axiomatic theory." In spite of this, some differences exist between the two models. For example, Hage, whose work is sociologically oriented, identified the social stratification emanating from unequal reward systems, as the basic characteristic of organizations. In the Aston model, stratification is not defined as the variable of organizational structure. When Hage's model was applied in the study of educational organizations, items constructed for measuring stratification did not account for a significant amount of factor variance (Murphy et al. :1975, Frank:1982).

As Pennings (1973:702) observed, despite having similar conceptual frameworks, the institutional and perceptual measures of structure yield somewhat different results. Hall (1963:37) found a positive correlation between centralization and formalization. The Aston researchers (Pugh et al. 1968) and Blau and Schoenherr (1971), who used institutional measures, found a negative relationship between the two variables. These contradictory findings appear to be the results of the differences in measurement approaches.

The indicators of the institutional approach, as Sathe (1978:234) noted, tap the formal or designed structure; the perceptual measures, on the other hand, reflect "the degree of structure experienced by organizational members." Hall (1982:98) claimed that "the use of perceptual measures has the advantage of recognizing the existence of informal procedures . . . deviations from official descriptions and prescriptions can not be detected with the use of

official records only."

Oganizational Assessment Model

While the Aston and Axiomatic models analysed the organizational structure primarily at the macro level, the Organizational Assessment model (OA), as Van de Ven and Ferry (1980:8-9) claimed, ". . . examines an organization at four different levels of analysis: the overall organization, work units, individual jobs, and relationship between jobs and units within the organization and with other organizations." Each level of analysis encompasses the variables of structure and overall organizational context together with the variables of organizational outcome. The methodology proposed by OA utilizes both questionnaire and institutional methods for gathering information. It measures structural configuration by analysing documents and by interviewing organizational experts. But in order to measure the distribution of authority, discretion, professionalism and standardization OA relies on responses gathered by questionnaire data.

The fundamental assumption of OA is that the design of an organization is not a natural or pre-determined condition for given states of nature. Rather, as Van de Ven and Ferry (1980:90) stated, ". . . the structure and functioning of organizations are the results of strategic choices made either implicitly or explicitly by coalitions of people both within and outside the organization."

Implications for the Present Study

Each of the three models described above can measure the existing structural framework of organizations. If the data are gathered at only one point in time, the indicators developed by each model can assess the structure existing at that time. Longitudinal data can measure the changes that take place in the structure during the period of data collection. However, these models of structural measurement by no means draw an accurate portrait of interactive processes that continually shape the features of control mechanisms or structure. In

spite of limitations of this nature, selected indicators from the Axiomatic model and OA were revised and then operationalized for the purposes of this study. Since the Aston approach draws data from official documents and from interviews of institutional spokesmen, it ignores the views of the majority in an organization. However, it can reveal the standard use of the rules and procedures. It was assumed that in a study which attempts to explore the cross-cultural differences and similarities between societies, the members' outlook or perception is a more important subject to explore than the standard use of the organizational rules, procedures and instructions written in the official documents.

B. JOB SATISFACTION: DEVELOPMENT OF CONCEPT

Despite numerous studies, there still remains considerable ambiguity in the literature about what constitutes job satisfaction. Locke (1969:309) claimed that any attempt to define job satisfaction presents problems since ". . . our understanding of the causes of job satisfaction have not advanced at a pace commensurate with research efforts." A great amount of research has been done on satisfaction in both educational and industrial settings. Based on their research, many scholars advance theories which aim at exploring the causes of satisfaction and dissatisfaction in the work place. Economists have developed the concept of economic person who makes choices that are calculated to maximise benefit and who is satisfied in his work in proportion to the expected financial reward. With the introduction of the human relations approach in management science an idea emerged that the fulfilment of social needs is the prime requirement of satisfaction. In order to understand the existing knowledge and the direction of the conceptual development, some major theories of satisfaction are described.

Hierarchy of Needs: Maslow

Maslow's (1954) work marked the beginning of a new era in the literature on job satisfaction. Combining economic needs with social needs, he developed a need satiation theory that stands on two fundamental premises:

1. Human needs are arranged in a hierarchical order of prepotency -- physiological, safety and security, belongingness, esteem and self-actualization needs. Maslow's prepotency feature specifies that the basic needs must be satisfied before needs at the next level are activated.
2. A fulfilled need is no longer a prime factor in activating an individual's behavior.

Porter's (1961) research on the Maslow theory enabled him to make modifications in the model. He argued that authority, and independent thought and action are distinctly different items from esteem items and introduced autonomy as a separate dimension in Maslow's hierarchical paradigm. Based on the conceptual framework of Maslow's theory, Porter (1961) developed the Need Satisfaction Questionnaire (NSQ).

Maslow's theory was not founded on actual behavioral research evidence, therefore, it is labelled as a theory of hypothetical assumptions. Moreover, his critics expressed their doubt whether self-actualization is indeed a need and suggested that it could be a socially desirable response resulting from cultural values.

Motivation-Hygiene Theory: Herzberg

The notion that the presence of a variable in a work situation leads to satisfaction and its absence leads to dissatisfaction, has been challenged by Herzberg, Frederick and Snyderman (1959). The research carried out by Herzberg and his associates revealed two sets of distinct factors related to satisfaction and dissatisfaction. The theoretical proposition of job satisfaction which they developed is known as the motivation-hygiene theory. This theory divides job characteristics into two categories:

1. Certain job characteristics operate primarily to dissatisfy the employee when they are not present. However, the presence of these factors does not motivate an employee to do more work. Herzberg identified them as hygiene or maintenance factors. Salary, job security, work conditions are examples of such factors.
2. The presence of a different set of job characteristics leads to high levels of motivation and

job satisfaction. If these conditions are not present, employees will not necessarily be dissatisfied with their work. Herzberg identified these job characteristics as motivators or satisfiers. He listed achievement, advancement, responsibility, recognition, possibility of growth and the work itself as satisfiers.

The findings of Herzberg's studies suggest that job satisfaction and dissatisfaction are not opposites to each other. Instead, the opposite of job satisfaction is no job satisfaction, and the opposite of job dissatisfaction is no job dissatisfaction.

It did not take long for Herzberg to receive a welter of criticism from contemporary researchers. His model has been seriously challenged on methodological and conceptual grounds. According to House and Wigdor (1967), and Locke (1976), criticism revolves around (1) the procedure used to obtain the information concerning job events, (2) the failure to obtain a measure of overall satisfaction and (3) the disregard of the fact that one factor can cause job satisfaction for one person and job dissatisfaction for another person, even in the same job situation. Herzberg's model is further criticized as a method-bound approach. Hunt and Hill (1969:102) contended that only those studies ". . .using [the] critical incident method generally confirm the theory. Those using other methods give less clear results."

Studies have revealed that hygiene and motivational factors function both as satisfiers and dissatisfiers. Based on their study of six occupational groups, Dunnette et al. (1967) concluded that such factors as achievement, recognition and responsibility seem important for both satisfaction and dissatisfaction. Similarly, Locke (1976) found Herzberg's contention that hygiene factors only prevent dissatisfaction (in other words cannot promote satisfaction) empirically indefensible. Locke (1976) noted that salary, although defined as a hygiene factor, can increase satisfaction.

Current Theories

Both Maslow and Herzberg explained job satisfaction from the need fulfillment perspective. Lawler (1973:66) claimed that the level of job satisfaction is not determined solely

by the amount of desired need that is fulfilled. Instead, the degree of satisfaction of individuals can be better explained by the perceived discrepancy between the amount of rewards received and the amount desired. This approach of job satisfaction measurement is known as the discrepancy theory.

Taking a different route, equity theory explains job satisfation in terms of equitable outcome. Gilmer and Deci (1977:233-234) noted that according to the argument advanced by the equity theory:

> . . . people prefer to have interactions which they perceived to be equitable. . . . workers will be satisfied with their jobs when there is no discrepancy between their outcomes and their belief about what is an equitable outcome. When there is a discrepancy, whether outcomes are higher or lower than what is perceived to be equitable, people will be dissatisfied.

The concept of discrepancy and the concept of equity form a theoretical foundation upon which Lawler's model of facet satisfaction stands.

Lawler (1973:65) argued that a certain combination of individuals' affective reactions to the different facets of their job determines the degree of their job satisfaction. He made a distinction between facet satisfaction and job (overall) satisfaction. Lawler (1973:64) defined facet satisfaction as "people's affective reactions to particular aspects of their job." Pay and promotion opportunities were identified as two facets of a job. His model measures an individual's facet satisfaction by means of the discrepancy that exists between what individuals have received from a facet of a job and what they expected. According to Lawler (1973), overall job satisfaction would be the sum of facet discrepancies.

Locke's value theory, which advances the notion of value hierarchy, supports Lawler's concept of facet satisfaction. As Locke (1976:1319) noted, "... job satisfaction results from the appraisal of one's job as attaining or allowing the attainment of one's important job values."

Satisfaction: Determinant or Outcome

Many researchers have investigated job satisfaction as a factor that determines turnover, productivity and absenteeism. Some, both in education and industry, contributed to an assumption that there is a strong relationship between job satisfaction and productivity. However, others do not support the notion. Locke's extensive investigation of the literature enabled him (1976:1334) to draw a conclusion that ". . . job satisfaction has no direct effect on productivity."

Hage (1965:301) defined members' satisfaction as an organizational end or outcome. In his study of satisfaction of Alberta teachers, Holdaway (1978) noted that job satisfaction is viewed as an organizational outcome, not as determinant. Smith, Kendal and Hulin (1969) claimed that job satisfaction is a legitimate goal of an organization. These views indicate agreement with notion that job satisfaction is an outcome of several factors that constitute a job.

Relationship Between Satisfaction and Structure

Hall (1982:56) contended that ". . . organizational structures take many forms." The variation in structural forms is one of the major concerns of researchers who attempt to explore the processes in organizations which causes individuals to be satisfied or dissatisfied with their jobs. Since the purpose of this study was to explore the relationship between satisfaction and the two variables of organizational structure, the findings of only those studies that measured the relationship of satisfaction with structural centralization and formalization were reviewed.

Relationship Between Satisfaction and Centralization

Mohr (1982:124) stated that ". . . participation in decision making may easily be seen as a form of decentralization." He (1982:128) then made the assumption that the correlation between participation and satisfaction will be strongly positive only for those who hold a desire

for participation. Miskel et al. (1979) used the Structural Properties Questionnaire (SPQ) for their study of relationships between school structure and teacher satisfaction. They (1979:114) found that "The centralization sub scale of the SPQ . . . tended to be negatively correlated with the dependent variables. . . ." One of the dependent variable happened to be the job satisfaction experienced by teachers.

The findings of Frank (1982) and DeTornyay (1981) are similar to those of Miskel and his associates. In her dissertation Frank (1982:127) reported that autonomy in decision-making (decentralization) was positively related to the job satisfaction expressed by the deans. Bachman et al. (1966) used task control and superordinates' influence over their subordinates as indicators for the measurement of centralization. Contrary to the findings of Frank (1982) and DeTornyay (1981), those of Bachman et al. (1966:130) reveal that subordinates' job satisfaction was positively correlated with task control and influence of superordinates. Belasco and Alutto (1972:52) concluded, ". . . the centralization of influence in the superintendent's office may be associated with increased teacher decisional deprivation, both of which, in turn, are associated with lower levels of teacher satisfaction." Coughlan (1971:56) concluded, "In the relatively open school organizational systems, . . . the teachers as a group were significantly more satisfied."

Most of the above mentioned studies indicate that there is a negative relationship between satisfaction and the level of centralization. It is important to note that these studies used a variety of indicators to measure centralization.

Relationship Between Satisfaction and Formalization

In her study of deans, Frank (1982:126) found that formalization of evaluation procedures was negatively correlated with autonomy need satisfaction. Moreover, she reported a negative relationship between social need satisfaction and the level of formalization. Fulfillment of the deans' self actualization needs, however, was positively correlated with the formalized evaluation procedures of universities.

Miskel et al. (1979:114) maintained that "the formalization-standardization indicator of general rules for teachers was a consistent predictor for all of the dependent variables, but the directions were positive . . . ." Their study, as mentioned earlier, used teacher satisfaction as one of the dependent variables.Herrick (1974) claimed that formalization was not a significant predictor of teacher motivation in elementary schools. Scott (1980) found that the job dissatisfaction of high school teachers in metropolitan New York was positively related to formalization

Implications for the Present Study

The above theories of job satisfaction represent three different perspectives. Maslow's and Herzberg's theories conceptualized satisfaction as the fulfillment of individuals' needs. Lawler (1973), and Gilmer and Deci (1977) observed a cognitive process through which individuals tend to demonstrate their level of satisfaction with the facets of their job. In his value theory, Locke combined the strength of both need-fulfillment and cognitive theories. These theories identified a number of job dimensions or facets of the job and proposed methods to measure individuals' satisfaction with each of these dimensions.

For the purposes of the study, attempts were made to measure respondents' satisfaction with structural properties of the organizations and their overall job satisfaction. The properties of structure were not identified as the dimensions of the job; satisfaction with structure was treated as a separate variable.

The method used by Dewar and Werbal (1979) was followed to develop the operational indicators of overall job satisfaction. In their exploration of validity of universalistic and contingency predictions of employee satisfaction and conflict, Dewar and Werbel (1979:433) measured satisfaction ". . . by two items indicating satisfaction with respondents' job and organization." In this study respondents were asked to indicate the level of their satisfaction with the overall conditions of job and whether or not they liked their work.

C. PERSPECTIVES IN CROSS CULTURAL RESEARCH

The notion of genotypical likeness and genotypical unlikeness in organizational characteristics across cultures, are the sources of two conflicting conceptual arguments which are described as the culture-free or universalistic and culture-specific perspectives. The universalists assume that organizations across nations are similar and that an organizational theory can be developed which is valid in different cultures and countries. In contrast, the researchers oriented towards the culture-specific (or culturalist) perspective argue that the forces of culture mold organizations into specific entities which contain characteristics that are different across social contexts. Organizations with dissimilar characteristics cannot be analysed by a model developed for universal applications.

Organizations Free of Culture

The argument that organizational characteristics across nations of the world are free from the particularities of a specific culture is associated with an assumption that the advancement in technology is moulding the fabric of developing societies into a common pattern. Despite cultural diversities, as Kerr et al. (1960) claimed, institutional frameworks and patterns of organizations across societies are converging. Their research found that this convergence is an outcome of the "common industrial logic."

Kerr et al. (1960) and Harbison and Myers (1959) defined the logic of industrial convergence in a broader context of social transformation and changes in management practices in industrializing societies. A group of scholars used this logic as the conceptual basis for comparative analysis of organizations. Hickson et al. (1979:29-30) concluded that a certain constancy occurs across nations in key relationships among organizational variables. There is an assumption that the direction of correlations between structural and contextual variables will be the same in all organizations irrespective of their size and location. For instance, even if an investigator finds that Asian organizations are more formalized than the North American ones, still the large North American organizations will most likely be more formalized than the small

Asian organizations. This is expected because of the assumed universally negative relationship between formalization and organizational size.

Furthermore, Hickson and his associates argued that management practices across nations or cultural settings can be analysed by universally applicable theories. Such "supranational theories," however, should stand on globally drawn inferences. The applicability of existing theories developed in the West is an issue which Azumi (1974) attempted to address. Azumi did not dismiss the notion that a great number of current theories are primarily a product of Anglo-Saxon culture with traces of ethnocentrism. Neither did he defended them as adequate tools of analysis able to articulate the essence of all cultures. Rather, he asserted that such limitations do not provide sufficient justification for developing a whole array of culture-bound theories prescribed for distinct societies of the world. Azumi (1974:527) contended, ". . . if the perspective of social science as developed in the West is inadequate, that must be demonstrated by the creation of a new and better social science" instead of developing separate social sciences for different societies.

Logic of Convergence and the Contingency Approach

As Child (1981:308) and Child and Tayeb (1983:27) indicated, the contingency perspective stands on the argument that:

> . . . contingencies of technological development, market and geographical diversification, large-scale production and close interdependence with other organizations are seen to impose a logic of rational administration which it becomes functionally imperative to follow in order to achieve levels of performance sufficient to ensure the survival of the organization. . . . It is argued that this logic is in all societies, irrespective of culture, economic or political systems, steadily pervading the design and management of organizations which are subject to high performance requirements either because of competitive pressures or because of external demands for their effectiveness. Cultural differences are therefore of diminishing importance.

The reasoning of the contingency approach stands on three fundamental premises:

1. Technology, task environment, size and interdependence are the factors that determine features of job and the design of organizations.
2. Industries and business firms across the world pass through similar stages of development

as they grow. Technically, one particular stage can be described as a specific configuration of contingencies.

3. The variables of organizational structure and context demonstrate stable relationship across cultures or countries which have similar configuration of contingencies.

Most of the research carried out within contingency perspectives investigated task environment, technology, size and dependence between organizations. The supranational theory advanced by Hickson and his associates rests upon the investigations of the size of the organization, size of the parent organization and dependence on other organizations. Not all of these contingencies relate consistently with the variables of structure in the organizations investigated across nations. Child and Tayeb (1983:31-32) maintained that the contingency approach of Hickson and his colleagues:

> . . . was developed upon little more than the strength and consistency of correlations, and has therefore been subject to the charge of abstracted empiricism. Other writers on contingency notably Lawrence and Lorsch (1967), Perrow (1970), and Woodward (1965), have, however, contributed more considered rationales to account for measured associations between contingencies and organizational variables. Nevertheless, substantial uncertainty still persists concerning the theoretical status of contingencies. Are they imperatives? The answer seems to be negative: there is accumulating evidence that different organizational designs and working relationships can cope sufficiently well for survival in the context of similar contingencies.

Several writers, including Child, agreed that the contingency approach needs to be handled carefully due to its unclear theoretical and empirical standings.

To summarize, the culture-free thesis stands on the fundamental argument that theories in social science should have universal implications. A universal theory attempts to define organizations above national specifics and cultural particularities.

Organization Influenced by Culture

As Maurice (1979:44) contended, "While it is true that the thrust of scientific analysis is toward theoretical generalizations, it is also true that such generalizations must be historically informed." This point of view, according to Maurice, is a reminder of the limitations of any endeavours which attempt to compare two organizations across cultures in isolation from their

socio-cultural context. In addition to this isolated analysis of organizations, Maurice saw limitations of the culture free approach in recognizing the essence of culture. He (1976:7) stated that in the process of testing cultural differences, researchers who use the concepts and measurement techniques of culture-free thesis ". . . remove all societal or cultural dimensions from organizations and their structures."

The concepts of universal validity of the measurement, general specification of variables, unidirectional causation, causation at the level of defined variables, ontological priority of the definition of goals before the selection of means, and determination of practice by nomothetic theory are widely used as guiding principles of social science research. Culturalists look at these concepts as theoretically indefensible. To explain the point Sorge (1983) exemplified the analysis of the nature of organizational or social change. He (1983:117) maintained:

> Contingency theorists would think of change as happening along known and well-defined continua of variables; but change would not affect the validity of nomothetic statements. This is the assumption that enables them to recommend, or predict, changes in one area on the basis of those in another, and that has produced a rationalistic view of theory-practice relation. . . . Contingency theory becomes highly problematical when social changes is not recurrent . . . but emergent,i.e., involving newly emerging dimensions of variables. In this view, the intention to explain what is still unexplained leads, of necessity, toward the change that is emergent.

Sorge argued that the rationalist tendency of sequencing the phenomena and events (e.g., prediction of one events on the basis of others) yields unrealistic results especially in a situation where events are irregular, nonroutine or emergent. To analyze the emergent social changes one has to rely on "unexplained leads" such as judgement, knack, and even intuition.

Perrow (1970b:76) explained the "search behavior" espoused by the contingency writers. He (1970b:76-77) contended that ". . . the nature of the search procedure depends a good deal upon what is known about the material that one is to transform through techniques. If a good deal is known that is relevant to the transformation process, search can be quite routine and analyzable. A search becomes unanalyzable if a researcher has to deal with unique factors. While dealing with such factors, one most rely upon vague processes, such as empathy and understanding. According to Perrow (1970b:76), experience, judgement, knack, wisdom

and intuition are the ". . . residue of something we do not understand at all well. . . ." An "unanalysable search procedure" relies on such leads. For culturalists, as Sorge (1983:125) claimed, judgement, wisdom and experience are the important faculties to understand, because they can be used as valuable tools to solve the problems of organizations.

The culturalists and contingency writers seem to disagree on the issue of what is analyzable and what is not. Sorge (1983:126) noted:

> Human work tends to be unanalyzed, but analyzable. Moving ahead of subsequent analysis, it brings forth emergent organizational phenomena that become objects of analysis. Thus, instead of works being made to fit into an existing analysis, the shifting focus of attention in work makes for continuous emergence of novel organizational phenomena to which analysis adopts.

The crux of the argument is that the technique of investigation should have the ability to sense the emergence of new phenomena in the proces of analysis.

To summarize, the culturalist perspective stands on the following tenets: (1) organizations do not necessarily function in a rational way, therefore, organizational practices can not be drawn from theories of logical formulation; (2) organizational practices cannot be generalized as universals; (3) in the analysis of organizations, the holistic trait of human action should be considered rather than only one set of variables; (4) the science of organization should emphasize the emergence of new dimensions rather than the exploration of variation along known dimensions; and finally, (5) the culturalists look at the characteristics of culture as phenomena unique in every society. Cross-societal comparison of such phenomena, therefore, would not be a meaningful endeavour.

Methodological Propositions

In this section, two contrasting methodological propositions are discussed. The theorists within the culture-free perspective argue that the characteristics of societies can be measured by a model based on global inferences. A culturalist approach denies the validity of any such attempt which compares organization by the use of a universal model.

Arguments for Universal Model

The literature shows that a number of comparative studies conducted in the 1970s explored relationships between the dimensions of organizational structure (e.g., centralization, formalization) and context (e.g., size, technology) across two or more nations. This is an approach initially used in single nation studies conducted especially in British and North American contexts. When this was applied in cross-national comparison, its limitations became apparent. In order to make a model of single nation studies applicable for cross-national comparison, Hickson et al. (1979:26-28) advanced two methodological propositions:

1. Societal characteristics need to be interpreted and defined to form variables relevant to the analysis of organization.
2. The measures of organizational variables used in the single nation studies needs to be transformed or expanded into "world measures."

Societal Characteristics as Variables

In their cross-national studies of organizations, Horvath et al. (1976) and McMillan et al. (1973) used a research design based on the Aston model. As mentioned earlier, structural and contextual variables are used as the basis of organizational analysis without any consideration of related social and cultural phenomena. Maurice (1979:44) noted that in such a model:

> . . . the structural variables are based upon indicators that are convenient for measuring the intrinsic characteristics of the organization, but which result in isolating it from its societal environment. Similarly, the contextual variables . . . are explicitly considered as 'factors of a non-cultural kind'; operationalizing them can therefore have no societal significance.

The suggestion of Hickson and his associates' (1979:26-27) for formulating societal variables, can be described as a response to criticisms such as that of Maurice. In their opinion, by excluding vague generalities such as traditionalism or ethnicism and by avoiding the all inclusive definitions of the culture itself, the societal variables could be formulated with the objective of

including only those aspects of society that are relevant to organizations. The purpose is to develop explicit concepts that are operationally measurable. However, from the culturalist perspective, cultural or societal characteristics are unique in every society, thus are not generalizable. Comparison of such unique, thus non-generalizable characteristic phenomena, therefore, is not meaningful. Responding to the concern Hickson et al. (1979:27) wrote:

> . . . there is no need to think of the culture of a society as being unique variables peculiar to it, which are applicable to that society alone. Culture is more usefully seen as a unique pattern (of scores) on a set of variables applicable across societies. The characteristic phenomena of a given society are its positions on variables, not the variables. Whether any of the flavour of life is lost must depend not on the necessity to conceptualize potential comparative variables in itself, but on the insight with which they are formulated to express our range of experience.

World Measures of Organizational Variables

The Aston, Organizational Assessment, and Axiomatic models are widely used in organizational analysis. For instance, Hage's Axiomatic theory measures the level of formalization of organizational activities by the extent or proportion of jobs that are codified and roles that are specified as well as the degree of latitude of individual discretion allowed within a particular position. These indicators are developed from the inferences drawn from the research conducted mostly in North America. Consequently, they may have limitations in their capacity to consider some peculiar range of role specification and job codification implemented, say, in Nepalese organizations. Hickson et al. (1979:28) suggested that, in principle, measures developed in one society should not be applied to others without an effort to explore beyond the range of variations of the original measures. The implication is that if a Canadian university's level of formalization has to be compared with a Nepalese one, then the measures of the research instrument should be widened in range so that both Canadian and Nepalese peculiarities can be incorporated.

To summarize, the concept of world measures, the definition of culture as a unique pattern of scores and the notion that the characteristics of societies and the organization located

in different societies can be analysed by the use of a universal model are the fundamental premises of the culture-free perspective in cross cultural research.

Argument for The Measurement of Social Particularities

Culturalists observe the concept of world measures as too much confined within the boundaries of the Weberian logic of rationality. Such a concept, as Maurice (1979:44) stated, stands:

> . . . upon concepts (and indicators) to which their very generality gives ipso facto the status of universality, thus undermining the possibility of really testing for the national (or cultural) effect. . . . The constraints of the test of the national effect thus appear to be counteracted by a logic of the rationality of the organization, considered a priori as supranational, therefore universal, but founded actually theoretically upon concepts and model-building, and empirically upon indicators and operational processes that exclude any reference to the structures of the society within which the organization operates.

By criticizing the approach that attempts to generalize societal and organizational characteristics and by rejecting the validity of the process of model-building, Maurice (1979) advanced an alternative proposition for cross-cultural research known as the "societal effect approach." In order to explain the basic tenets of the approach he (1979:47) stated:

> It postulates not the convergence of societies but their discontinuity (historical and cultural). It believes that a sociology of organizations is essentially the research into the social conditions of their formation and development. Its object, therefore, is as much the analysis of the processes of formation of organizational structures as the structures themselves; a process by which the national discontinuities that are expected are evidenced.

The design and assumptions of inquiry proposed within the culture-specific perspective are similar to those of the naturalistic inquiry paradigm described by Guba (1978, 1981), Guba and Lincoln (1981), Owens (1982) and Lincoln (1983). In a naturalistic paradigm, there are five defining axioms of research:

1. A social research considers intangible realities "devised in the minds of persons to extend meaning to events and render them interpretable and understandable" (Guba, 1981:6).
2. In naturalistic research "inquirers and respondents influence each other through their mutual interactions" (Iles, 1984:12).

3. In social research law-like generalizations are impossible because the social phenomena are time and context-bound. Therefore, a researcher tends to "devise idiographic working hypotheses that fit a particular context" (Guba, 1981: 5).
4. In social research "explanation is sought in terms of patterns of plausible influence established through holistic field study rather than cause-effect relationships" (Iles, 1984:12).
5. Inquiries in social sciences are value-bound. Guided by values inherent in the context where research is carried out, inquirers select the inquiry paradigm and apply suitable methods to analyze information (Guba and Lincoln, 1982: 238).

These axioms of naturalistic paradigm are similar to the fundamental tenets of the hermeneutic research orientation.

In cross-cultural studies of organizations an emphasis on the exploration of cultural and historical particularities and discontinuities may enhance the possibility of developing isolated country or social profiles. Each of the profiles may develop in such a fashion that one can hardly be compared with other. In her extensive review of the literature, Roberts (1970) addressed this particular issue. She advocated the need of a common methodological design for cross-cultural research. In her opinion, the absence of such a design may add to the haphazardness of country profiles.

D. CONCEPTUAL FRAMEWORK OF THE STUDY

Three broad bodies of literature have been reviewed: (a) organizational stucture, (b) satisfaction and (c) contrasting perspectives in cross-cultural research. The review shows that the existing knowledge in each of the three fields evolved from continuous research. Old perspectives were widened by the emergence of complementary ideas. Yet, at the same time, the premises of a number of theories were challenged on conceptual and methodological grounds. By complementing or contradicting the existing concepts, researchers rendered a positive contribution for the advancement of knowledge. These three bodies of literature had direct

implications on the research design of this study. The following major concepts were drawn from the literature.

1. The characteristic phenomena of societies or cultures are related to the structural design of organizations.
2. The structure of organizations influences members' satisfaction.
3. Two contrasting perspectives exist with regard to the analysis of organizations across cultures: (i) Organizations in different cultural settings can be analysed by the application of universal measures. Such measures, however, should be formulated from globally drawn inferences. (ii) Deep rooted forces of culture mold organizations into unique entities. Unique characteristics of organizations cannot be compared by the application of universal models. Such attempts, therefore, may be meaningless.
4. Two distinct objectives are implicit within the two perspectives. One intends to explore similarities that exist in the characteristics of organizations across-cultures. The other emphasizes differences between organizations.
5. Culture appears to be a complex whole that encompasses unlimited components. The existing complexity in the definition of culture is the reason that a number of comparative studies relegated culture to residual variables, i.e., the phenomena that were not explained by commonly known variables.

In view of these concepts, attempts were made (a) to develop a research design that incorporated useful ideas from both perspectives of comparative research, (b) to select a suitable approach to inquiry, and (c) to define the dimension of culture. A clear-cut definition of the dimensions of culture helps to avoid the confusion associated with the notion of culture. A clear definition was essential because, for the operational purposes, in this study there was an attempt to delineate some selected dimensions of culture which seemed to be relevant to the specific aspects of university organizations explored.

Reconciliation Between the Two Perspectives

The theorists who advocate application of a universal model argue that the characteristics of organizations across societies are converging. The diversities of culture are viewed as having little or no influence on organizations. As mentioned earlier, the culturalists hold a different notion. They believe that cultural particularities determine human preferences and decisions. Consequently, the preferred modes of action are instrumental in the development of unique behaviors within organizations. Table 2.2 shows the two theoretical positions with regard to the relationship between culture and organization.

Table 2.2

Relationship Between Culture and Organizations as Explained From Culture-Free and Culture-Specific Perspectives

Culture-Free Argument				
Contextual Contingencies	→	Organizational Structure	→	Pattern of Behavior
Culture-Specific Argument				
Culture	→	Preferred Modes of Action	→	Organization Structuring Management Practices

Note: The table is based on Child's work (1981:349)

In Child's (1981:349) suggestion, the theoretical differences between the two arguments can be reduced drastically if it is accepted:

> First, that the decision to adopt organization structural designs is not in reality rigidly determined by contextual factors and that such factors are themselves subject to some degree of managerial influence. . . . Second, that culture could itself be regarded theoretically as another contextual contingency.

The two contrasting arguments (culture-free and culture-specific) can be merged into one conceptual framework if the above considerations are taken into account. Such reconcilation, however, raises some serious theoretical concerns. First, as Child (1981:349) noted, culture when "...regarded as a contingency, may carry conflicting implications for those of other

contingencies." Second, culture represents the process of interaction among various dimensions of societies. It is, therefore, highly qualitative and more ". . . complex than the variables which have commonly been regarded as contingencies hitherto." With a somewhat different argument Negandhi (1983:20) arrived at a similar conclusion. He explained the importance of the evolving concept of "general systems" in the analysis of complex organizations. Within the general systems perspective, holism, open systems, input-transformation-output-phenomenon, society and dynamic equilibrium are identified as subsystems of a given system. These subsystems represent a number of aspects of a system that are complex, abstract and qualitative in nature. Negandhi (1983:20) suggested:

> It is indeed challenging to use such abstract attributes in understanding the functioning of complex organizations. The present state of knowledge, however, as well as the understanding of those concepts, is so minimal that the use of them has created considerable confusion among scholars of different disciplines. Until such time as these general systems concepts are fully developed and operationalized, contingency theory, the so called mid-range approach, seem to provide a realistic means of using some of the salient attributes of the systems concept for the study of complex organizations.

Implicit in this statement is a suggestion that new knowledge can be explored by the use of the available conceptual and analytical means. Guided by a similar concern, Child (1981:349) suggested that culture should be reduced to a limited number of salient dimensions for purposes of cross-cultural comparison.

In view of these arguments, three dimensions of values were operationalized as the variables of culture. Indicators were developed to measure these variables. The conceptual rationale of the selection of value dimensions as the variables of culture is based on the works of Bales (1970), Hofstede (1980b), Parsons (1973), Kroeber and Parsons (1958), Child (1981) and Lammers (1978).

Selection of the Variables of Culture

Kelley and Worthley (1981:165) observed different positions taken by the researchers regarding the linkage between culture and managerial attitudes and behavior. They identified two reasons for this inconsistency: (a) the vague definitions of culture and (b) the ". . .

methodological difficulties of accurate translation of culture in operational research and having a representative sample."

Morton (1936) defined culture of a society as "the configuration of values, normative principles, and ideals which are historically unique"(Morton in Aiken and Bacharach,1979:216). Empirically, Morton's definition may look ambiguous and unspecific for those researchers who, for the sake of operational convenience, prefer to define culture in a limited sense: culture as "pattern of organizational roles and norms embodied in certain paramount values" (Lammers and Hickson, 1979:6).

Kroeber and Kluckhohn (1952) analyzed one hundred and sixty-four definitions of culture which encompassed a whole range of dimensions: knowledge, values, customs, traditional behavior, just to name a few. In order to avoid such confusion Child (1981:323) suggested that researchers might consider the definition of culture advanced by Kroeber and Parsons (1958:582-583) who proposed that the concept "culture" should be confined to ". . . transmitted and created content and pattern of values, ideas and other symbolic meaningful systems as factors in the shaping of human behavior." In his article "Culture and Social Systems Revisited" Parsons (1973:36) made a distinction between culture and social systems as follows: "the cultural system . . . is specifically concerned with systems of meaning, the social system is a way of organizing human action which is concerned with linking meaning to the conditions of concrete behavior in the environmentally given world."

Once the "symbolism," (Smircich, 1983:350) "system of meaning," "normative and preferential condition for action" (Child, 1981:324) were identified as conceptual elements of culture, and these elements were recognized as factors conditioning social interaction and behavior, operationalization of culture in organizational research became possible. Child (1981:324) stated:

> In so far as the citizens of one country do share certain values in a common cultural systems, it is reasonable to suppose that these are likely to influence the conduct of organizations located in that country, especially with regard to individual behavior. . . . If the clustering of values in one country does not approximate that in another country, one would therefore expect to find tendencies toward a different pattern of organizational conduct in the two nations.

In view of above arguments, value orientations were measured as dimensions of culture. To define the term value Bhagat and McQuaid (1982:656) cited Triandis et al. (1972:16) and maintained that ". . . value represent relationships among abstract categories with strong affective components, implying a preference for a certain kind of desirable state of action, being, or affairs."

As mentioned earlier, this study began with describing (a) respect for authority (b) individualism and (c) tolerance for uncertainty as three dimensions of value orientation. The definition of these three dimensions of value are presented in Chapter I. On the basis of the given definition, operational indicators were developed, and by applying factor analysis the validity of the original definition was examined. The procedure applied to develop the operational indicators of these dimensions and the results of the factor analysis are presented in Chapter III and Chapter IV.

Selection of Inquiry Paradigm

The proposition that suggests the development of a universally applicable theory relies on a systematic analysis of organizational characteristics across nations and societies. This nomothetic approach relies on a search procedure that is law like, orderly and predictable; it progresses rationally toward a goal by generalizing the organizational characteristics explored in different cultural and national contexts. Culturalists, who view the design of organizations as a reflection of a particular culture, employ an idiographic approach of analysis in their investigations of organizations. The term idiographic refers to uniqueness and inimitability. This is an approach which focuses specifically on phenomena that are unpredictable, divergent and particularistic. Child and Tayeb (1983:58-59) maintained:

> In its purer form, the idiographic approach. . . . would be concerned primarily with mapping out the configurations of context and organization found in different countries and exploring the reasons for them in terms of features peculiar to the particular societies. They would aim to produce comprehensive case studies analyses that treated the national character of organizations with a high degree of sensitivity to its roots in history and the way it reflected culture.

Cross-cultural comparison of organizational characteristics and their relationship with culture,

in general qualitative terms, is possible even by the use of various case-studies conducted in isolation from each other. More precise comparison, however, is impossible unless the samples are carefully matched and the dimension of relationship, which is under investigation is clearly specified.

As Lammers (1978:485) contended, in the social science, comparison as a scholarly pursuit signifies a type of inquiry that:

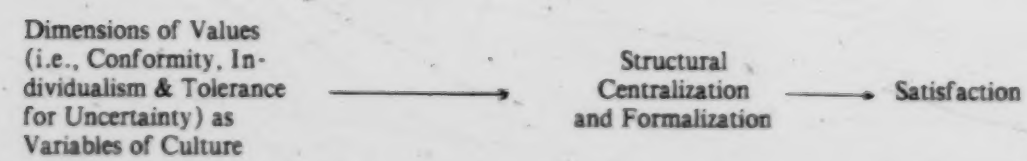
> . . . juxtaposes social units or social processes in various social settings in order to explain or understand the units or processes in question -- or argue that a meaningful comparison requires an application term comparative in this sense stands for a multilevel strategy ... to explain or understand in terms of macrovariables, phenomena at a micro- or mesolevel

Researchers (England and Harpaz:1983, Van de Vijver and Poortinga:1982) argue that a meaningful comparison requires an application of similar methods across cultures. On the basis of these arguments, as Lammers (1978:503) claimed:

> The full-fledged idiographic method of studying one particular organization within its peculiar institutional and societal context to understand its unique or distinct features can for obvious reasons hardly be called comparative. However... efforts to determine what is distinct about an organization always imply comparison, if not explicitly, than implicitly.

In spite of these limitations, the idiographic approach can be useful for an in-depth exploration of the basic mechanism or process in the relationship between culture and organizations in a single setting. However, to compare organizations of various settings, one has to rely on nomothetic methods of inquiry.

In this study relationships between the variables of culture and the variables of two university organizations located in Alberta and Nepal were analysed, which is diagrammatically explained as follows:


Dimensions of Values (i.e., Conformity, Individualism & Tolerance for Uncertainty) as Variables of Culture
Structural Centralization and Formalization
Satisfaction

The relationship (a) between the dimensions of values and structural centralization and formalization, and (b) between the variables of structure and job satisfaction were investigated. In addition, the relationship between the dimensions of value and satisfaction were also explored.

To summarize, the following conceptual and method-related features were associated with the research design of this study.

1. The study emphasized the exploration of differences and similarities between the two university organizations.
2. By avoiding the vague generalities associated with the term "culture," selected dimensions of culture were delineated to be operationalized as variables. The research findings of Bales and Couch (1969) and Hofstede (1980b) were used in the selection of these specific dimensions.
3. A nomothetic approach was employed to explore similarities as well as dissimilarities in the relationship between members' cultural orientation and the variables of organizations in two cultural settings.
4. Relationships, first, between the dimensions of culture and organizational structure and second, between structure and the members' satisfaction were measured by the use of similar method.

E. SUMMARY

This chapter contains a review of three bodies of literature -- organizational structure, satisfaction and the theories of cross-cultural research. The review revealed that organizational structure can be conceptualized in two different ways. The Neo-Weberian writers have defined structure as the prescribed framework of organizations. This definition stands on a concept that structure is a formal configuration of roles and procedures. The natural and open systems writers lay emphasis on interactive processes taking place in organizations. The concept of duality of social structure incorporates the tenets of the formal (prescribed) framework and

informal interactive processes. According to the concept of duality, structure is both constituted by human interaction and at the same time is the medium or framework of this constitution. Two commonly used approaches of structural measurement were described. The perceptual approach relies on aggregation of interview or questionnaire data. The institutional approach utilizes a direct method of information collection. In this approach, information is obtained from official documents and from interviews with official spokesmen.

The theories of job satisfaction were also outlined. Maslow's need satiation and Herzberg's motivation-hygiene are seen as need-fulfillment theories. The equity theory explains job satisfaction in terms of discrepancy between the amount of rewards received and the amount desired. According to Lawler's theory, a certain combination of an individual's affective reactions to the different facets of their job determines the level of his job satisfaction.

The literature review indicated that two schools of thought exist in the cross-cultural research. The writers, who believe that organizational characteristics are free from the particularities of culture, argue that management practices across nations can be analysed by an universally applicable model. The culturalists claim that organizations located in different societies are influenced by deep-rooted cultural forces. These forces mold organizations into unique entities. Unique organizations cannot be compared by the application of universal models. The conceptual framework for the study includes (a) a reconciliation between the two perspectives of comparative research, (b) the selection of a suitable approach of inquiry and (c) the definition of the dimension of culture.

Chapter III

RESEARCH METHODOLOGY

The research methodology for the study was essentially that associated with the development of a questionnaire and the collection of survey data. In the sections which follow, the description of the development and of the questionnaire is followed by a discussion of the validity and the reliability of the instruments. In a subsequent section, the procedure applied in the collection of data and the techniques used for the treatment of data are explained. This includes the discussion of sample size, distribution of the questionnaire and the statistical techniques used for the analysis of data. Finally, some demographic information about the respondents is presented.

A. INSTRUMENTATION

The design of the study was exploratory in nature. An attempt was made to uncover cross-sample similarities and differences in the pattern of relationships that exist between the variables of culture and organization. The study was descriptive and nonexperimental; it relied on quantitative techniques of data collection and analysis. Data were collected by the use of a questionnaire. The questionnaire approach to data collection was deemed to be appropriate for this study. One of the advantage of the questionnaire is that it makes large segments of population available to the researcher for sampling purposes at a minimum cost. This approach, as Mouly (1978:189) stated ". . . allows greater uniformity in the way questions are asked. . . ." and provides ". . . greater comparability in the responses." In addition to these advantages, Ferber and Verdoorn (1962) pointed out that the questionnaire approach (a) solicits frank answers, (b) avoids interviewer bias, (c) provides opportunity for the respondents to answer the questions at their leisure, with sufficient time to "think things over",

(d) and makes certain segments of the population easily approachable.

In view of these considerations, the "Organizational Survey Questionnaire" was developed to collect the data. The questionnaire, which was designed exclusively for the purposes of this study, was organized into five sections. These sections included instruments to explore: (a) centralization of decision-making authority, (b) formalization of organizational activities, (c) respondents' satisfaction with structural centralization and formalization, and their overall job satisfaction, (d) respondents' value orientations, (e) and, finally, the biographical information on the respondents. The copies of the questionnaire is included in Appendix A and B.

Section I

The items in Section I were designed to collect information concerning centralization of decision-making authority at Tribhuvan University (TU), Nepal, and at the University of Alberta (U of A). This section contained thirteen items which referred to the following decisions: the allocation and distribution of resources for departmental operations, the approval of a new academic program and changes in general administrative procedures in a department, selection of course content and text-books, assignment of final grades, admission of students, the promotion of a faculty member, and the selection of members of departmental committees, department chairman and new professors. All of these decisions were related to the activities conducted within a department, the lowest administrative unit of university organizations.

A seven-point scale represented seven different decision making levels, ranging from individual professor to units and committees functioning at the university-wide level. Based on their judgement, respondents were asked to choose any one of the seven decision-making levels as the most influential in making the particular decision outlined in each item. If the higher decision making levels of a university (i.e., units, councils, or committees that function at the faculty and university-wide levels) are identified as the levels with greatest influence over most

of the decisions, then the university can be viewed as having a centralized decision making structure.

The items in the scale used in the measurement of centralization were similar to those of the Structural Properties Questionnaire (SPQ) developed by Murphy, Bishop and George (1975). A number of SPQ items that measure centralization are made up of a four point-scale which represents four decision making levels of a school system in North America, i.e., 1=teacher, 2=department chairman/assistant principal, 3=principal, and 4=district office administrators. In somewhat similar fashion, the researchers who used the Organizational Assessment Instrument (OAI) measured the distribution of authority in organizations. As Van De Ven and Ferry (1980:124-125) explained, OAI asks respondents to indicate the amount of influence exerted by various administrative levels of an organization on (a) internal operations of units, and (b) total office. SPQ and OAI had implications for the design of the instrument used in this study to measure centralization.

Section II

Eight items in this section were designed to measure structural formalization of university organizations. These items contained eight different statements. The first four statements were designed to measure respondents' understanding of the level of work performance they were expected to maintain, the criteria on which their work was evaluated, and the extent to which their work was governed by prescribed rules and guidelines. The remaining four statements of this section were developed to measure the intensity of supervision and/or surveillance, if any, experienced by the respondents in their work. The respondents were asked to indicate how frequently the circumstances described in each of the items occurred in their work-place. A seven-point scale represented the response categories which ranged from "never" to "always." The assumption was that when respondents indicated that the circumstances described in the items always occurred , the university could be regarded as a more formalized organization than if they seldom or never occurred.

Some features of this instrument were similar to those of SPQ and the instrument use by Dewar and Werbal (1979:433). SPQ used curriculum guidelines as a scale for the measurement of formalization of schools. Dewar and Werbel (1979) operationalized four different items to measure the extent of supervisory practices experienced by respondents. These items were modified to make them suitable for the purposes of this study.

Section III

Section III of the questionnaire contained the instrument developed to measure level of satisfaction with structural centralization and formalization as perceived by the members of the universities. In addition, this section included items designed to explore overall job satisfaction. Nine items were developed for the measurement of satisfaction with structural centralization and formalization. In the process of item development two aspects were considered: (a) an attempt was made to identify the dimensions of centralization and formalization measured in this study, and (b) questions were designed in such a fashion that the answers would reveal the respondents' satisfaction with all dimensions of structural centralization and formalization. For example, respondents were asked to indicate their satisfaction with the way rules were enforced, work was supervised, performance was evaluated, and standards were applied in the promotion decisions. Rule implementation, standard procedures for performance evaluation, and awards were some of the dimensions of formalization identified. Similarly, while answering the questions, respondents indicated their satisfaction with the extent of their participation in department and university level decisions, and with the amount of discretionary power they exercised in teaching and research activities. The extent of participation in the decision making-process and the amount of discretionary power allowed at work were the two major dimensions of centralization included for this study. Each question in this instrument corresponded to specific dimensions of centralization and formalization. The responses to those questions were assumed to reveal the level of the participants' satisfaction with each of the dimensions of centralization and of formalization.

The decision as to how many items should be included to measure overall job satisfaction was influenced by the methodology applied in previous research. Rice (1978) asked four different questions to explore overall job satisfaction. To measure satisfaction with thirty-five facets of the job of the Alberta school principals, Gunn (1984) used the instrument developed by Rice. Gunn's (1984:83) decision to operationalize a single item to measure overall job satisfaction was a departure from Rice's statistical treatment of four items. Dewar and Werbel (1979:433) measured satisfaction with two items. They asked respondents to indicate satisfaction with job and organization.

The term overall job satisfaction signifies a total feeling concerning all aspects related to a job. Based on the assumption that one can express such an overall feeling by responding to a limited number of questionnaire items, only two items were developed. The respondents were asked to indicate the level of their satisfaction with the job and the general conditions under which they worked. Responses were collected by the use of a seven-point scale ranging from "very dissatisfied" to "very satisfied."

Section IV

Thirty-two items which were developed to measure the value orientations of the respondents were included in Section IV of the questionnaire. As mentioned in the previous chapter, three dimensions of value were operationalized. These dimensions were: (a) respect for authority, (b) individualism, and (c) tolerance for uncertainty. The definitions for these dimensions provided a basis for constructing the items.

The items included in this section of the questionnaire contained statements such as, "Respect for authority is a virtue youth must learn," "Every person needs to be a nonconformist," "Discipline and loyalty are the most important qualities of a good citizen," and "People should not take risks even if the awards appear to be attractive." Respondents were asked to choose any one of the response categories on a seven-point scale, ranging from "strongly disagree" to "strongly agree." If a group of respondents tended to agree with the

statements of individualism items, then it was inferred that the group was more individualistic than one which tended to disagree with the statements. In a similar fashion, respondents' tolerance for uncertainty and their tendency to respect authority were measured on the basis of their agreement or disagreement with the statements developed to measure those orientations.

These value statements were generated from the research instruments developed by Bales and Couch (1969), Altemayer (1981) and Hofstede (1980b). Bales and Couch (1969) collected eight hundred and seventy-two value statements from various tests of values, personality tests, theoretical treatments of values, and statements made by research participants in group discussions. They (1969:5) noted that by eliminating near duplicates and by combining keywords and phrases from separate statements the total number of statements was reduced to one hundred and forty-three. A factor analysis of these selected items yielded four orthogonal factors: (a) acceptance of authority, (b) need-determined expression vs. value-determined restrained, (c) equalitarianism and (d) individualism. From the analysis of one hundred and sixteen thousand responses obtained by the use of a single questionnaire in forty countries, Hofstede (1980b:45) delineated four dimensions of national culture: (a) power distance, (b) uncertainty avoidance, (c) individualism, and (d) masculinity. Factor analysis was applied to identify these dimensions of national culture. In his extensive study of right-wing authoritarianism in Canada, Altemayer (1981) used an instrument which in fact was a modified verson of the well known F Scale of Adorno and associates.

The design of the above research instruments provided a guide for development of the instrument operationalized in this study. A number of items from the instruments developed by Bales and Couch (1969), Hofstede (1980b),and Altemayer (1981) were modified and included in the questionnaire.

Section V

In the final section of the questionnaire (Section V) the demographic and personal information of respondents was solicited, namely, their age, job experience, the faculty in

which they worked, and positions held. This information was used to develop the profile of demographic characteristics of the respondents. The data concerning the distribution of respondents among the four faculties (arts, sciences, business and education) of the university were required for the research question related to the similarities and differences between faculties at TU and at U of A on the variables of organizational structure, satisfaction and cultural values.

Pilot-test of Questionnaire

To establish the validity of the questionnaire, two different processes were undertaken. First, the draft of the questionnaire was distributed to twenty-one professors at the U of A and two professors from TU, who were studying at the U of A and the University of Calgary. They were asked:

1. to provide comments about the validity of the definition of the variables of structure, satisfaction and cultural values, which were used to formulate items for the measurement of the variables;
2. to provide judgement about the degree of congruence between the content of the items and the definition of the variables;
3. to indicate the degree of relevance of each item to the university context; and,
4. to comment on the clarity of wording and meaning of the items.

An opinionnaire was designed to collect the above comments. On the basis of the respondents' comments and recommendations the questionnaire was revised.

Second, a group of thirty professors from the University of Alberta participated in a pilot test of the questionnaire. The participants reviewed the whole questionnaire to check for lack of clarity in instructions, ambiguous content of items, the appropriateness of the rating scale, and overlap of meaning carried by items. They responded with written comments, concerns and recommendations. Some of the participants were interviewed for additional comments and for clarification of their written comments. From these recommendations, final

revisions were made throughout the questionnaire.

B. VALIDITY

The validity of a questionnaire refers to the extent to which the items measure what they purport to measure. The question of validity can be raised with regard to construct validity, content validity and the predictiveness of a questionnaire. In Mouly's definition (1978), content validity indicates ". . . the extent to which the situations incorporated in the test are a representative sample of the characteristic it is designed to measure." On the other hand, construct validity involves the logical relationship between the conceptual definition of the concept or phenomena being measured and the methods used to measure it. In this study, the following factors contributed to the validity of the questionnaire.

1. The questionnaire was pilot tested. Based on the recommendations of the pilot-test participants, a final copy of the questionnaire was prepared.
2. Following the initial stages of data analysis, a factor analysis conducted in the study verified the construct validity of the instruments. The factor analysis explored: (a) what actually was measured by the items developed for each variables, and (b) the extent to which the items measured factors of equivalent or similar nature in the two samples.
3. The researcher who developed the instruments had five years of experience as a teacher at T U, Nepal. He used his understanding about Nepal to make the questionnaire applicable in the Nepalese context.

A number of other considerations were taken into account to ensure the willingness of the respondents to provide the information requested. First, anonymity was guaranteed; second, the instructions in every sections of the questionnaire were clearly written; and third, the content of the items was related to the personal thoughts and feelings of the professors in both universities. To answer these questions, professors did not have to seek information from external sources.

C. RELIABILITY

A reliable instrument, according to Treece and Treece (1977) and Mouly (1978), should be able to reproduce a set of measurements in different times and settings. The split-half technique is commonly used to measure the reliability of an instrument. In this technique, two separate scores (one from odd numbered items another from even numbered items of the questionnaire) are obtained. Then the correlation between these two sets of scores is then calculated. Travers (1969:158) explained the technique as follows:

> . . . one can regard the items of the test as consisting of two separate tests, each of half length. One can, for example, consider all even-numbered items as one form of the test and all the odd-numbered items as another. If the test is highly reliable, then the scores derived from one half of the items should be highly correlated with the scores derived from the other half.

The method described above was applied to test the reliability of the instruments operationalized in this study. The coefficients obtained for the items of each of the instruments were as follows:[1]

	Alberta	Nepal
Centralization	0.80	0.75
Formalization	0.80	0.80
Satisfaction with Structure	0.90	0.85
Overall Job Satisfaction	0.80	0.80
Cultural Values	0.70	0.65

When the Spearman-Brown formula was applied, the coefficients ranged from 0.79 to 0.95. Consequently, all instruments developed for the measurement of organizational and cultural variables proved to be reliable at an acceptable level.

---

[1]The coefficients were obtained for only those items which were selected by the factor analysis.

D. DATA COLLECTION AND ANALYSIS

Two samples of the professors of the University of Alberta and Tribhuvan University in Nepal were asked to respond to the questionnaire. For the purposes of this study, a professor was defined as any individual who held the position of assistant professor, associate professor, or professor at the University of Alberta, and any individual who held the position of assistant lecturer, lecturer, reader, or professor at Tribhuvan University in Nepal. The Alberta respondents were randomly selected from a list of faculty members. Before applying the random method to the selection of Nepalese respondents from the TU campuses in Kathmandu Valley, a list of those university teachers with a knowledge of English was acquired. Approximately fifteen percent of the professors, who were the members of the Nepali and Sanskrit departments, were excluded from the list which was used to select the respondents. In the Nepalese system of higher education, all professors except those who teach Nepali and Sanskrit languages and literature are required to have a working knowledge of the English language. This is because the undergraduate programs in arts, business, science and education are dependent on textbooks written in English. Similarly, the graduate program and research in the Nepalese system rely on resource materials published in English.

Questionnaire Distribution and Collection

At the University of Alberta, the questionnaires were distributed via the mailing facility available on campus. Each questionnaire was accompanied by a covering letter outlining the purposes of the study and assuring anonymity. A self-addressed envelope was also included. A total of three hundred and forty questionnaires was mailed in December 1983 and in early January 1984. By the end of January 1984, one hundred and forty-six of them were returned. Two follow-up letters were subsequently sent to everyone who had received questionnaires. The follow-up letters elicited a positive response. By March 1984 two hundred and sixty-two questionnaires were returned.

In January 1984, the investigator visited Kathmandu, Nepal to collect data. Two enumeraters provided part-time services to deliver three hundred sealed questionnaires to the respondents, and to collect envelopes containing returned questionnaires. Each questionnaire was accompanied by a covering letter similar to the one sent to respondents in Alberta. By the second week of March 1984, two hundred and seven questionnaires had been received.

Treatment of Data

The data were punched directly from the pre-coded questionnaires to computer cards. Five different statistical techniques were applied in the analysis of data. These techniques included factor analysis, one-way analysis of variance, Pearson product-moment correlation coefficients, *t* tests and the comparison of means of various groups of respondents. Factor analysis was used (a) to explore the underlying factors of the structure variables, satisfaction and values, and (b) to identify a common factor structure (for each variable) emerging from two sets of data. This study began with the assumption that two organizations in two different cultural settings cannot be compared unless the measures used for comparison contain similar underlying factors in the data acquired from both settings. The procedures applied in the factor analysis are described in Chapter IV.

Pearson product-moment correlation coefficients were applied (a) to explore the correlation between the two items of overall job satisfaction, and (b) to investigate interrelationship among the variables of structure, satisfaction, and the dimensions of cultural values. The differences between the Alberta and Nepalese samples on variables of structure, satisfaction, and value orientation were explored by the use of *t* tests. The technique was also applied to investigate differences between the two samples in terms of the factors of structural centralization and formalization, and satisfaction with structure. The analysis of variance (ANOVA) technique was used to investigate the mean difference between the four faculties at TU and the U of A -- arts, sciences, business and education. The Scheffé test was employed to determine the location and direction of the differences among the groups of respondents from

different faculties.

E. PROFILE OF THE RESPONDENTS

The questionnaire yielded data on the demographic characteristics of the respondents from the University of Alberta and Tribhuvan University. In this section, four different sets of information are reported: (a) the age of the respondents, (b) their work experience, (c) the faculties with which they were associated, and (d) their faculty position.

Age

The frequency and percentage frequency distributions of respondents in both samples by age are presented in Table 3.1. In the Alberta sample, twenty-five percent of the respondents were less than forty year old, and thirty percent were fifty or older. The age distribution of the Nepalese sample was different. Over seventy percent of the Nepalese respondents were less than forty. Those who were fifty or older constituted approximately twelve percent of the Nepalese sample. As seen in Table 3.1, the age of thirty-two percent of the Nepalese respondents was thirty or less, whereas just 1.5 percent of the respondents from Alberta belonged to this age group.

Work Experience in Respective Universities

Table 3.2 indicates that thirteen percent of the respondents from Alberta and twenty-eight percent of the Nepalese respondents had fewer than five years of experience. Approximately, fifty-eight percent of the Nepalese respondents and thirty-three percent of the respondents from Alberta had less than ten years of work experience. Over forty percent of the Alberta respondents worked in the university system for fifteen or more years, while only twenty-two percent of the Nepalese respondents had such experience.

Table 3.1

Distribution of Alberta and Nepalese Respondents by Age

Age	Alberta Sample		Nepal Sample	
	Frequency	Percentage	Frequency	Percentage
Under 30	4	1.5	66	31.9
30 - 39	62	23.5	85	41.1
40 - 49	116	44.7	30	14.5
50 - 59	63	24.4	23	11.1
60 or older	15	5.9	3	1.4
Total	260	100.0	207	100.0

Table 3.2

Distribution of Alberta and Nepalese Respondents by Years of Experience

Years of Experience	Alberta Sample		Nepal Sample	
	Frequency	Percentage	Frequency	Percentage
Less than 5	34	13.1	59	28.5
5 - 9	50	19.3	61	29.4
10 - 14	68	26.2	42	20.3
15 - 19	66	25.3	32	15.5
20 or more	42	16.1	13	6.3
Total	260	100.0	207	100.0

Faculty

Frequency and percentage distributions of respondents in four faculties are reported in Table 3.3. Twenty percent of the Nepalese and thirty-two percent of Alberta respondents were associated with the Faculty of Science. In both samples, over thirty percent of the respondents identified themselves as professors in the Faculty of Arts or Humanities and Social Sciences. Twenty-two percent of the Nepalese respondents and eleven percent of th Alberta respondents were working in the Faculty of Business or Commerce. In both samples, the Faculty of Education was represented by twenty-three percent of the respondents.

Faculty Position

The frequency distribution of the respondents in terms of their position or rank is presented in Table 3.4. As the table shows, thirteen percent of the respondents from Alberta were assistant professors, thirty-three percent were associate professors, and fifty-four percent were full professors. In the Nepalese sample, eighty-one percent of the respondents were either assistant lecturers or lecturers. Only ten percent and eight percent of the total respondents held the positions of reader and professor, respectively. As mentioned earlier, at Tribhuvan University, assistant lecturer and lecturer are recognized as faculty positions. In this study, these positions were regarded as equivalent to the position of assistant professor. The associate professor at the U of A and the reader at TU had similarities in terms of qualifications and experience required for the positions, and the responsibility expected to be fulfilled by individuals who held these positions.

F. SUMMARY

The design and the process of instrument development, the validity and the reliability of the instrument, the sampling techniques, the procedures of data collection, the treatment of the data, and the demographic characteristics of the respondents have been described. A single

Table 3.3

Distribution of Alberta and Nepalese Respondents by Faculty

Faculty	Alberta Sample		Nepal Sample	
	Frequency	Percentage	Frequency	Percentage
Arts (Humanities and Social Sciences)*	87	33.5	67	32.4
Education	59	22.7	48	23.2
Business (Commerce)*	29	11.3	45	21.7
Science	84	32.5	47	22.7
Total	259	100.0	207	100.0

* In the Nepalese system the Faculty of Arts was known as the Faculty of Humanities and Social Sciences, and the Faculty of Business was known as the Faculty of Commerce.

Table 3.4

Distribution of Alberta and Nepalese Respondents by Position

Position* (or Rank)	Alberta Sample		Nepal Sample	
	Frequency	Percentage	Frequency	Percentage
Assistant Professor (Assistant Lecturer and Lecturer)	34	13.2	169	81.6
Associate Professor (Reader)	87	33.4	21	10.1
Professor	139	53.4	17	8.3
Total	260	100.0	207	100.0

* In this study Assistant Lecturer and Lecturer of the Tribhuvan University were identified as equivalent to Assistant Professor of the University of Alberta. The position of Reader was regarded as equivalent to the Associate Professor.

questionnaire was developed to collect information at two different universities. The questionnaire was organized in five sections. Section I and Section II contained items designed to measure centralization of decision-making authority and formalization of organizational activities. Respondents' satisfaction with structural centralization and formalization was measured by the instrument included in Section III of the questionnaire. In addition, two items were developed to explore the level of overall job satisfaction. Thirty-two items were included in Section IV of the questionnaire. These items were designed to investigate the value orientations of the respondents. The final section of the questionnaire contained items which were used to collect the demographic information of the respondents.

Two groups of randomly selected respondents from Alberta and Nepal were asked to respond to the questionnaire. The biographical data indicated that the respondents from Alberta were older and more experienced than their Nepalese counterparts.

The factors that contributed to the content validity of the instruments were also discussed. To test the reliability of the instruments, a split-half coefficients technique was employed. Results showed that all instruments were sufficiently reliable. Several statistical techniques were applied to analyse the data. These techniques included Pearson Product-Moment correlation coefficients, *t* tests, analysis of variance and factor analysis.

Chapter IV

DEFINING SCALES FOR ORGANIZATIONAL AND CULTURAL VARIABLES

The questionnaire items operationalized to collect data from the two samples were factor analysed. A separate analysis was conducted for each of the four different sets of items developed for the measurement of the organizational and cultural variables. These sets were as follows: items designed to measure structural centralization and formalization of the university organizations, items to investigate members' satisfaction with the degree of centralization and formalization, and items constructed to explore the selected dimensions of value orientation, i.e., respect for authority, individualism and tolerance for uncertainty. In addition to the factor analysis, a correlation coefficient was calculated for the two items designed to measure overall job satisfaction. The presentation of findings for each of these analyses is preceded by a brief discussion of some methodological issues.

A. ANALYTICAL PROCEDURES

As has been mentioned, structural centralization and formalization, satisfaction with structure, and overall job satisfaction were identified as the organizational variables for this study. In addition, selected dimensions of values were measured as the variables of culture. The review of the literature shows that Giddens (1976, 1979), Pugh et al. (1963, 1968, 1969b), Hage (1965, 1972, 1982), Hall (1962, 1982) Ranson et al. (1980), Mintzberg (1980) and Van de Ven and Ferry (1980) made substantial contributions to developing the concept of structure. Similarly, a number of writers, such as Locke (1976) Lawler (1973) Porter (1961) and Smith et al. (1969), defined the dimensions of satisfaction. Kroeber and Kluckhohn (1952), Parsons (1973), Smircich (1983), Negandhi (1983), Bales and Couch (1969) Child (1981) and Hofstede (1980b) defined culture, explained the relationship between the concepts of culture and values,

and identified the dimensions of values. With these writers' work in mind, the variables operationalized in this study were defined, and items were constructed for the actual measurement of these variables.

The definitions of the variables carried distinct meanings. Attempts were made to develop items that would reflect these specific meanings. As Hage (1972:72) has suggested, the application of such a method may have two major consequences: (a) the items may have limitations in reflecting the meanings implied by the definition of a variable, and (b) the items may reflect the meanings implied by the definitions of more than one variable or factors of a variable. Since this study used one questionnaire to collect data in two different settings, it was necessary to explore the meanings represented by the items in both sets of data. In order to address these concerns, an attempt was made to explore (a) the meanings represented by the items developed for each variable, and (b) the factorial structure of responses from the two samples.

Factor analysis can aid in addressing both of these areas. Lemke and Wiersma (1976:150) explained that a ". . . method used to confirm what content or constructs a test measures is factor analysis." In addition, as Kerlinger (1973:659) claimed, "It tells us, in effect, what tests or measures belong together--which ones virtually measure the same thing. . . ." Hence, the results of factor analysis were used to determine to what extent responses to a given scale or set of items by the two samples, in effect, measured something equivalent. This, indeed, is the crux of the analysis for any study which is designed to explain cross-cultural similarities and/or differences in organizational characteristics.

The factor analyses which were carried out served two major purposes. First, they were an attempt to validate the underlying structure of each of the seven variables included in the study. Second, with regard to each variable, attempts were made to identify a 'common factor structure' emerging from both sets of data. The assumption was made that a variable (e.g., the centralization of decision making authority) which contains similar factors in both sets data, can be used as a valid basis to compare the two samples. This removes the possibility of trying

to compare two somewhat non-comparable measures emerging from two different samples. In the process of establishing comparability of scales, those items which were not related to the common factor structure were excluded from further analyses.

B. RESULTS OF ANALYSIS OF ORGANIZATIONAL VARIABLES

In this section, the first results presented are for three different analyses which explored the underlying factors of three sets of items developed to measure centralization, formalization, and satisfaction with structure. These findings are followed by the presentation of correlation coefficients between the two job satisfaction items designed to measure overall job satisfaction.

Centralization of Decision Making Authority

Centralization of decision making authority was one of two structural variables included in the study. Responses to thirteen questionnaire items developed to measure the variable were analysed using principal component analysis with varimax rotation. Analyses with two, three and four factor solutions were conducted. Attempts were made to interpret the factors emerging from these three different solutions. The results of the three factor solution were deemed to be the most interpretable. Results of the three factor solution are presented in Table 4.1. As seen in this table, the items developed to measure centralization of decision-making authority in the university organizations referred to thirteen selected decisions concerning the allocation and distribution of resources for departmental operations, changes in general administrative procedures applied within a department, the approval of a new academic program, selection of text-books and course content, assignment of grades, admission of students, the promotion of a faculty member, the selection of members of departmental committees, and the selection of department chairman and new professors. The results of the factor analysis showed that Items 3, 4, and 9, which referred to decisions regarding the approval of a new academic program, changes in general procedures for departmental

Table 4.1

Factor Matrices of Centralization Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the decision making level which has greatest influence over decisions concerning:						
1. the allocation of funds from University sources to a department	.10	.07	.61	-.03	.49	-.02
2. the distribution of available resources among activities within a department	-.34	-.21	.27	.24	.63	-.12
3. the approval of a new academic program in a department	.34	.52*	.27	.35	.41*	.02
4. the changes in general procedures for departmental operation	.12	.61*	-.15	.41	.48*	.18
5. the areas of research in which a professor is involved	-.10	.75	.05	.11	-.01	.48
6. course content, i.e. areas of subject matter, on which a course should focus	.00	.07	.77*	.18	.17	.60*
7. final grades or marks students are assigned in a course	.18	.19	.60*	.00	-.10	.80*
8. selection of text and/or reference materials for a course	.22	.06	.78*	-.20	.32	.58*
9. admission of graduate students in a department	.10	.76*	.21	.25	.55*	.20

continued

Table 4.1 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the decision making level which has greatest influence over decisions concerning:						
10. selection of members to serve on departmental committees	.24	.19	-.50	.02	.65	.15
11. promotion of a faculty member	.67*	.06	.27	.77*	.12	-.04
12. selection of a new professor	.71*	.18	.00	.81*	.10	.04
13. selection of the department chairman	.73*	-.06	.09	.76*	.01	.20
Percent of cummulative variance	25.2	37.7	47.2	23.6	38.2	48.6

Note: For items which loaded on similar factors in the two samples, asterisks indicate factor on which they had highest loading.

operations and the admission of students loaded on Factor II. In the results of both samples, Items 6, 7 and 8 loaded on Factor III. These items represented the decisions concerning course content, assignment of grades and student admission. The promotion and selection decisions included in Items 11, 12 and 13 loaded on Factor I in both samples. Items 1, 2, 5 and 10 did not loaded on corresponding factors in the two different samples.

A comparison of the two factor matrices presented in Table 4.1 indicates that if Items 1, 2, 5 and 10 were not considered in the analysis, the remaining nine items would have the same pattern of loadings in both the Alberta and Nepalese samples. This suggests that the meaning represented by these nine items was similar in both samples. The difference in factor loadings of Items 1, 2, 5 and 10 across samples, suggests that the respondents at the University of Alberta (U of A) may have interpreted the items differently from their counterparts at Tribhuvan University (TU) Nepal. Since the items loaded on different factors in the two samples, any scales in which these were included would not be comparable. They were, therefore, excluded from further analysis. The remaining nine items were again factor analysed using the same procedures as before. The results are presented in Table 4.2.

As the table shows, the combination of nine items contained an underlying factor structure which was almost identical in both sets of data. Specifically, Items 3, 4 and 9 were loaded on Factor II, Items 6, 7 and 8 loaded on Factor III and Items 11, 12 and 13 loaded on Factor I. The results support the conclusion that the respondents from two different settings attached similar meanings and understandings to these items. In other words, the cross cultural data drawn from these items seems to reflect similar constructs, and the use of the items for the purpose of cross cultural comparisons is supported.

The values of factor loading of nine items are presented in Table 4.2. The three factors accounted for 56.4 percent and 58.5 percent of variance of the Alberta and Nepalese data respectively.

Table 4.3 presents the definition of three factors identified by the factor analysis. These factors were defined on the basis of the content of items related to these factors. Each of the

Table 4.2

Factor Matrices of Selected Centralization Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the decision making level which has greatest influence over decisions concerning:						
3. the approval of a new academic program in a department	.35	.66*	.00	.22	.64*	.29
4. the changes in general procedures for departmental operation	.23	.55*	.24	.06	.60*	-.07
6. course content, i.e. areas of subject matter, on which a course should focus	.16	.19	.68*	-.03	.03	.81*
7. final grades or marks students are assigned in a course.	.11	-.20	.75*	.15	.07	.72*
8. selection of text and/or reference materials for a course.	-.22	.23	.66*	.20	.01	.85*
9. admission of graduate students in a department.	.08	.66*	.30	-.03	.74*	.29
11. promotion of a faculty member.	.75*	.24	-.08	.70*	.11	.26
12. selection of a new professor.	.79*	.24	.00	.60*	.38	.05
13. selection of the department chairman	.80*	.08	.17	.83*	-.02	.01
Percent of cummulative variance	30.4	45.8	56.4	28.5	44.0	58.5

Note: Asterisks indicate items for scales and factors on which they had highest loading. Only those items are included in the table which were used for the measurement of centralization.

Table 4.3

Definition of Factors of Selected Centralization Items

Factors	Decisions	Factor Definition
I.	11. promotion of a faculty member	Selection and Promotion Decisions
	12. selection of a new professor	
	13. selection of the department chairman	
II.	3. the approval of a new academic program in the department	Decisions related to Departmental Operations
	4. the changes in general procedures for the department operation	
	9. the admission of students	
III.	6. course content, e.g. areas of subject matter	Instructional Decisions
	7. final grades students are assigned in a course	
	8. selection of text and/or reference materials for a course	

three factors presented in Table 4.3 was made up of three items. The substance of the items was carefully analysed to extract the definition of a particular factor. The items associated with Factor I referred to decisions concerning the promotion of a faculty member, selection of a new professor, and the department chairman. Therefore, the factor was defined as selection and promotion decisions. Factor III items referred to decisions concerning course content, assignment of grades and selection of text-books and reference materials. Based on the nature of these decisions, they were defined as instructional decisions. In a similar way the decisions included in Factor II items were defined as decisions related to departmental operations.

Formalization of Organizational Activities

The formalization of organizational activities was the second variable included in the study. Eight items were constructed to explore the degree of structural formalization of university organizations. The first four items were designed to measure respondents' understanding with regard to the level of work performance they were expected to maintain, the criteria under which their work was evaluated, and the extent to which their work was governed by prescribed rules and guidelines. The remaining four items were designed to measure the intensity of work supervision experienced by the respondents. The respondents indicated the frequency of occurrence of the circumstances described in each of the items. Responses to eight questionnaire items were analysed using the techniques of principal component factor analysis with varimax rotation.

The results of the analysis presented in table 4.4. indicate that a set of similar factors emerged from two sets of data. Items 1 and 2 loaded on Factor II, and, in both samples Items 3 and 4 loaded on Factor III while Items 5, 6, 7 and 8 loaded on Factor I. The three factors accounted for 66.3 percent of variance of the Alberta data and 65.0 percent of variance of the Nepalese data.

The similar factor structure observed in the two sets of data by no means was free of methodological problems. As Table 4.4 shows, in the Nepalese sample Item 4 loaded on Factor

Table 4.4

Factor Matrices of Formalization Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the frequency of occurrence of the following circumstances:						
1. Professors know what level of work performance is expected.	.01	.90*	.01	.00	.90*	-.12
2. The standard of performance on which each professor's work is evaluated is clearly specified.	.13	.87*	.15	-.08	.64*	.07
3. A professor's work schedule in relation to areas such as office hours and when holidays are taken, is governed by prescribed rules.	.11	.08	.77*	.00	-.13	.87*
4. Course descriptions specify instructional methods and sequence of topics a professor should follow in teaching a course.	.05	.03	.78*	.27	.50	.52*
5. Professors frequently feel that they are being watched to see that rules pertaining to the job are obeyed.	.62*	-.35	.20	.61*	.00	.22
6. Sanctions for violating rules and procedures pertaining to a professor's job are severe.	.79*	.00	.16	.82*	.13	-.05
7. The work of a professor is frequently supervised or evaluated to see that it measures up to prescribed standards.	.68*	.28	-.02	.86*	.14	.02
8. When a professor is discovered violating a work related rule, severe sanctions are imposed.	.84*	.10	.00	.84*	.10	.04
Percent of cummulative variance	30.4	51.9	66.3	38.8	52.3	65.0

Note: Asterisks indicate items for scales and factors on which they had highest loading.

III, however, its loading on Factor II was also high (.50). In the results of the Alberta sample Item 5 presented a similar problem.

A question can be raised as to what extent the two factor matrices presented in Table 4.4 matched one another. By utilizing an orthogonal factor match procedure, the factor matrix drawn from the Nepalese data was rotated in order to determine its maximum congruence with the Alberta sample. Skakun et al. (1970:1) stated that "A least-squares approach is employed for the solution of T" (transformation matrix). The rotated matrix then becomes an estimate of the target matrix. The target matrix, in this case, was the one drawn from the Canadian sample. The result of the transformation rotation is presented in Table 4.5.

The transformed matrix presented in the table resolved, to a large extent, the problem of double loading observed previously with Item 4 in the Nepalese sample. The loading of this item (.39) on Factor II, as indicated in Table 4.5, may still be interpreted as significant. Its substantially higher loading (.61) on Factor III, however, provided sufficient justification to label it as a Factor III item.

Table 4.5

Transformed Factor Matrix of Formalization Items: Results From Nepalese Sample

Item No.	Factors I	II	III
1.	.07	• .90	.02
2.	-.03	• .62	.17
3.	-.05	-.27	• .84
4.	.28	.39	• .61
5.	• .60	-.09	.24
6.	• .83	.07	.00
7.	• .87	.06	.08
8.	• .84	.03	.09

Note: Asterisks indicate items for scales and factors on which they had highest loading.

Table 4.6 presents the definition of the factors identified by the analysis. There are three sets of items which are associated with three different factors. The content of the items

Table 4.6

Definition of Factors of Selected Formalization Items

Factors	Circumstances	Factor Definition
	Indicate the frequency of occurence of the following circumstances:	
I.	1. Professors know what level of work performance is expected. 2. The standard of performance on which each professor's work is evaluated is clearly specified.	Performance Standards
II.	3. A professor's work schedule in relation to areas such as office hours and when holidays are taken, is governed by prescribed rules. 4. Course descriptions specify instructional methods and sequence of topics professors should follow in teaching a course.	Rules (academic and administrative)
III.	5. Professors frequently feel that they are being watched to see that rules pertaining to the job are obeyed. 6. Sanctions for violating rules and procedures pertaining to a professor's job are severe. 7. The work of a professoris frequently supervised or evaluated to see that it measures up to prescribed standards. 8. When a professor is discovered violating a work related rule, severe sanctions are imposed.	Surveillance or Supervision

provided the basis for each of the factor definitions. The statement included in Factor I items (Items 1 and 2) referred to the specification of the level of work performance expected by the organization, and the standard of the performance evaluation. Factor I, therefore, was defined as performance standards. Applying a similar method, rules and supervision were identified as Factor II and Factor III

Satisfaction with Organizational Structure

Respondents' satisfaction with structural centralization and formalization were measured by the responses to nine questionnaire items. The respondents were asked to indicate the level of their satisfaction with the way rules were enforced, work was supervised, and performance was evaluated. In addition, they indicated their level of satisfaction with the extent of their participation in decisions, and with the amount of discretionary power they exercised in their work. The data drawn from these responses were analysed using the technique of principal component analysis with varimax rotation. The factor structure of these nine items was analysed using the two factor, three factor and four factor solutions. Attempts were made to interpret the results of these three different solutions. As in the case of other sets of items, the result of the three factor solution was felt to be the most interpretable. The results presented in Table 4.7 are based on the three factor solution. The analysis of data drawn from Alberta and Nepal showed that Items 2, 3, 4 and 5 were associated with Factor I. As two different sets, Items 6,7 and 8,9 loaded on Factor III and Factor II respectively. Item 1, however, showed different factor association across the two samples. In the Nepalese data it loaded on Factor I, while in the data drawn from Alberta the same item loaded on Factors I and III with values that were equal.

The two factor matrices of Table 4.7 show that if the cross sample difference observed in the loadings of Item 1 were ignored, the factor structures which emerged from the two sets of data contained features that were similar. Both matrices contain three factors with identical sets of items.

Table 4.7

Factor Matrices of Satisfaction with Structure Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
How satisfied are you with:						
1. the way your work is supervised	.46	.34	.46	.66	.33	.15
2. the way academic and administrative policies are put into practice	.69*	.37	.04	.78*	.18	.13
3. the way in which the rules are enforced	.68*	.33	.29	.80*	.04	.17
4. the extent of your participation in the decision making process at the department level	.62*	.26	.34	.66*	.17	.12
5. the amount of say or influence you have in university level decisions that affect you	.81*	.06	-.03	.65*	.10	.25
6. the amount of discretionary power you have in decisions concerning classroom teaching and research	.02	.14	.89*	.29	.00	.87*
7. your freedom to introduce new ideas into the departmental activities	.43	.05	.60*	.19	.45	.70*
8. the procedures under which your performance is evaluated	.26	.82*	.25	.20	.81*	.11
9. the rules and standards applied in salary and promotion decisions	.16	.90*	.07	.15	.80*	.10
Percent of cummulative variance	47.1	58.6	69.1	42.8	55.3	64.7

Note: For items which loaded on similar factors in the two samples, asterisks indicate factor on which they had highest loading.

The association of Item 1 with two different factors could be explained as the outcome of unclear meaning conveyed by its content. Most likely, it is understood in two different ways by the respondents from Alberta. This questionnaire item requires respondents to indicate the level of their satisfaction with the way their work was supervised. Although work supervision is carried out at the operational level of university organization, its relevance for professors with regard to their teaching and research activities is questionable. For respondents from Alberta such a question could lead to uncertainty as to the type of supervision implied. In contrast, the professors within the Nepalese university system were likely to be more accustomed to periodic supervision by administrative authorities. For them the meaning of this particular question of supervision probably was clear within the context of the system in which they work.

The above analysis led to the conclusion that the cross cultural responses to Item 1 did not refer to a similar meaning and, therefore, would not provide a reliable basis for comparison. Following the practice utilized previously, the item was excluded from further analysis. The remaining eight items were again factor analysed, and the results are presented in Table 4.8.

As was observed in the previous analysis, the items were again loaded on the same factors. For instance, Items 2, 3, 4 and 5 were associated with Factor I. Items 6 and 7 loaded on Factor III, and 8 and 9 on Factor II. These three factors accounted for 72.0 percent of variance of the data drawn from Alberta, and 67.0 percent of variance of the Nepalese data.

Despite the cross sample similarities in the loading pattern, methodological problems were not solved as entirely. In the data drawn from U of A, some problems still remained. Items 2 and 3 showed a substantial loading on Factor I. In spite of this high loading, they also displayed some loading on the other factors. As Table 4.8 shows, the values of their loading on Factors II and III, although significant, were much lower than their loading on Factor I. A similar problem was associated with Item 6. This item was highly loaded on Factor III (.62), and demonstrated significant loading (.44) on Factor I. On the other hand, the analysis of the Nepalese data indicated that Items 2, 3 and 6 were loaded on only one particular factor. This

Table 4.8

Factor Matrices of Selected Satisfaction with Structure Items:
Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
How satisfied are you with:						
2. the way academic and administrative policies are put into practice	.69*	.37	.00	.71*	.17	.22
3. the way in which the rules are enforced	.69*	.34	.25	.81*	.06	.18
4. the extent of your participation in the decision making process at the department level	.63*	.27	.34	.71*	.21	.06
5. the amount of say or influence you have in university level decisions that affect you	.81*	.06	.02	.70*	.14	.20
6. the amount of discretionary power you have in decisions concerning classroom teaching and research	.01	.16	.90*	.29	.00	.85*
7. your freedom to introduce new ideas into the departmental activities	.46	.07	.61*	.16	.33	.74*
8. the procedures under which your performance is evaluated	.26	.82*	.22	.17	.80*	.15
9. the rules and standards applied in salary and promotion decisions	.17	.90*	.07	.18	.82*	.08
Percent of cummulative variance	45.1	60.2	72.0	42.4	56.4	66.9

Note: Asterisks indicate items for scales and factors on which they had highest loading.
Item 1 was not used for the measurement of the variable, therefore, it is excluded from the table.

cross sample difference in the loading pattern indicates that a factor related discrepancy might have existed in the measures drawn across the two samples by the use of these items. To deal with this concern, the orthogonal factor match procedure was once again utilized to match the factor matrices for the two samples. By the application of this procedure the factor matrix drawn from the Alberta sample was transformed as closely as possible to the Nepalese factor matrix. The earlier matrix in this case becomes the estimate for the Nepalese one. The results of this transformation is presented in Table 4.9.

Table 4.9

Transformed Factor Matrix of Selected Satisfaction with Structure Items: Results from Alberta Sample

Item No.	Factors I	II	III
2.	• .71	.32	.01
3.	• .71	.29	.26
4.	• .64	.24	.35
5.	• .81	.00	.00
6.	.00	.17	• .90
7.	.44	.05	• .62
8.	.31	• .80	.21
9.	.23	• .89	.06

Note: Asterisks indicate items for scales and factors on which they had highest loading.

The transformed matrix presented in Table 4.9 appeared to be close to the target matrix drawn from the Nepalese data. Still the problem evident in the original matrix of Canadian data was not solved altogether. Some items were still loaded on two different factors. For example, Item 7 loaded on Factor III with a high factor loading value (.62). At the same time, it was loaded on Factor I with a significant factor loading value (.44).

On the basis of the results presented in the Tables 4.8 and 4.9, the three factors which emerged were defined in Table 4.10. Adopting the procedure applied previously, the content of the items was used to define the factors. As the table shows, in the first four items associated with Factor I, respondents were asked to indicate the level of their satisfaction with the way

Table 4.10

Definition of Factors of Selected Satisfaction with Structure Items

Factors	Satisfaction sources	Factor Definition
	How satisfied are you with:	
I.	2. the way academic and administrative policies are put into practice	Satisfaction with Administrative Practices
	3. the way in which the rules are enforced	
	4. the extent of your participation in the decision making process at the deparment level	
	5. the amount of say or influence you have in university level decisions that affect you	
II.	8. the procedure under which your performance is evaluated	Satisfaction with Performance Evaluation and Rewards
	9. the rules and standards applied in salary and promotion decisions	
III.	6. the amount of discretionary power you have in decisions concerning classroom teaching and research	Satisfaction with Discretionary Power and Freedom
	7. your freedom to introduce new ideas into departmental acivities	

policies were put into practice and rules were enforced, and to indicate their satisfaction with the extent of their participation in the decision-making process and the amount of influence they had in university level decisions. Based on the substance of these items, satisfaction with administrative practices was identified as Factor I. Factor II items referred to the respondents' satisfaction with the procedures under which performance was evaluated and the standards applied in salary and promotion decisions. Therefore, the factor was described as satisfaction with performance evaluation and rewards. In a similar fashion, Factor III was defined as satisfaction with discretionary power and freedom.

Overall Satisfaction with Job

Two questionnaire items were developed to measure the respondents' overall satisfaction with their jobs. They were asked to consider all aspects of their work in order to indicate the level of job satisfaction and their satisfaction with the general conditions under which they worked. The correlation of these items was calculated to test if they were measuring something similar.

The results for the Nepalese data showed that the value of the correlation coefficient was 0.64. An almost similar result was observed in the analysis of the data drawn from Alberta, where the value of the correlation coefficient was 0.65. This relatively high correlation coefficients observed in both sets of data suggest that the items were measuring similar constructs. In other words, while answering these two questionnaire items, all the respondents were indicating their overall satisfaction with the job and the general condition under which they worked.

C. RESULTS OF ANALYSIS OF CULTURAL VARIABLES

In an attempt to analyse selected aspects of culture, three dimensions of values were identified as research variables. In the early stages of the study, the literature in social psychology, organizations and management was reviewed and subsequently utilized as the

source of a number of items used to measure the value orientation of the respondents. A total of thirty-two items was constructed. These items comprised statements such as: "There is hardly any problem that can't be solved," "One who stands alone should be admired," "A job with which you are familiar is always preferable to what is unfamiliar," "Personal growth and achievement should be the major goal in one's life," and, "Discipline and loyalty are the most important qualities of a good citizen." Respondents were asked to indicate the extent of their agreement or disagreement with these statements. The data were analysed using the techniques of principal components analysis with varimax rotation. In each of the samples, three factor solutions seemed to provide interpretable results even though they accounted for less than 40 percent of the variance in each sample.

A comparative analysis of two factor matrices presented in Table 4.11 indicates that most of the items which loaded on Factor I in the Alberta sample loaded on Factor II in the Nepalese sample and vice versa. In order to make them similar to the data of the Alberta sample, the positions of Factors I and II in the Nepalese data were interchanged in Table 4.11. The purpose was to make the two sets of data easier to compare.

The results of the factor analysis show that, among thirty-two items which were developed to measure the respondents' values, twenty-one loaded on corresponding factors in both samples. The remaining items -- Items 2, 4, 5, 11, 15, 16, 18, 20, 29, 30 and 31 -- loaded differently on various factors across the samples. Since they represented different factors across two samples, it was obvious that the scales emerging from these items would not be similar. Consequently, these eleven items were excluded from further analysis, to avoid the possibility of comparing two, perhaps non-comparable measures. The remaining twenty-one items were once again factor analysed using the principal component technique and varimax rotation. The results are presented in Table 4.12.

As Table 4.12 shows, all twenty-one items of the Alberta sample loaded on the same factors as observed in the initial results presented in table 4.11. The results drawn from the Nepalese sample, however, indicated a somewhat different pattern of loadings in the two

Table 4.11

Factor Matrices of Value Statement Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
1. There is hardly any problem that can't be solved.	.11	.15	.19*	.45	-.09	.52*
2. Respect for authority is a virtue youth must learn.	.60	-.04	.00	-.15	.44	.47
3. One who stands alone should be admired.	.02	.67*	-.01	.49*	.00	.34
4. In a work situation what is to be done and how it is to be done should alwas be clearly specified.	.28	-.19	-.05	-.31	-.43	-.25
5. In family matters decisions made by parents should not be questioned by the children.	.56	.11	-.22	-.72	.30	-.10
6. Every person needs to be a non-conformist.	-.16	.53*	-.28	.30*	-.16	.17
7. A job with which you are familiar is always preferable to what is unfamiliar.	-.21	-.03	.55*	.39	-.34	.57*
8. Members of organizations should respect and follow the standards set by their leaders.	.66*	-.03	-.06	-.10	-.72*	-.06
9. Individuals should be prepared to compromise with colleagues in order to achieve consensus.	.35*	-.14	-.12	-.12	-.59*	-.15

continued

Table 4.11 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
10. Members of an organization should strive to acquire similar values and ideals.	.55*	-.05	.18	-.05	-.64*	.06
11. Laws should not be defied even if there is some doubt as to their validity.	.59	-.04	.25	-.47	.46	.06
12. Personal growth and achievement should be the major goal in one's life.	.12	.51*	.16	.58*	.08	.40
13. It is difficult to enjoy a social gathering where most of the people are strangers.	-.02	-.22	.48*	.20	-.29	.40*
14. Every member of society should strive to maintain the established social standards.	.56*	-.05	-.04	.11	.66*	-.02
15. Members of an organization should have limited involvement in each other's life and problems.	.33	.29	-.12	.65	.18	.04
16. Those who lead routine and predictable life styles miss most of the joy of living.	-.13	.23	-.24	.51	-.02	.22
17. Sanctions imposed by society on those who violate established standards are not as severe as they should be.	.53*	-.07	-.18	-.27	.52*	-.13
18. To be superior a person must stand alone.	.07	.66	-.16	.22	.01	.23

continued

Table 4.11 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
19. It is more fun to tackle a complicated problem than to solve a simple one.	.11	.43*	.37	.51*	-.13	.45
20. Discipline and loyalty are the most important qualities of a good citizen.	.72	.03	.00	.10	.14	.45
21. The pursuit of individual interests is ethical as long as no one is harmed.	.14	.43*	-.03	.65*	-.13	.37
22. One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting.	-.21	.09	.58*	.06	-.20	.68*
23. What a member of an organization needs most is strict discipline.	.54*	.03	-.29	-.09	.46*	.05
24. In life a person should "go it alone", working on his/her own and trying to make his/her own decisions.	.02	.71*	.02	.55*	-.12	-.05
25. People should not take risks even if the awards appear to be attractive.	-.19	-.02	.61*	.09	-.11	.70*
26. When one stops respecting authority his/her situation isn't worth much.	.63*	-.08	-.12	-.15	.53*	-.25
27. One should not depend on others.	.15	.47*	-.10	.71*	.11	.02

continued

Table 4.11 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
28. Differences in opinion (or conflicting ideas) within organizations do more harm than good.	-.36	.05	.53*	.25	-.31	.41*
29. Young people have to get over rebellious ideas and settle down as they grow up.	.59	-.06	-.25	-.09	.28	-.36
30. Individual interests should come secondary to the welfare of the group.	-.46	.07	.07	-.03	-.15	-.08
31. In today's organizations activities should be governed by clearly specified rules and procedures.	-.48	-.13	.00	-.22	-.12	-.04
32. If it were not for the rebellious ideas of youth there would be less progress in the world.	.27	-.41*	.02	-.65*	-.19	.02
Percent of cummulative variance	17.0	26.5	32.4	21.3	32.4	37.5

Note: For items which loaded on similar factors in the two samples, asterisks indicate factor on which they had highest loading.

successive analyses. Although there were many similarities in loading patterns, Items 1, 13, 24 and 28 in the Nepalese sample changed their position of factor association in these two successive analyses. For example, Items 1, 13, and 28, loaded on Factor III in the first analysis but loaded on Factor II in the second analysis. In this regard, a substantial loading of these items on Factor II, observed even in the previous analysis reported in Table 4.11, was noted. In the first analysis, they were identified as Factor III items due to their high loading on that factor and the considerable loading on Factor II was ignored. In the second analysis, after a number of items were excluded (some of them were the part of a cluster that formed Factor III), these three items were in a different correlational relationship due to the changed composition of items.

Since Items 1, 13, 24 and 28 were loaded on different factors in the results drawn from two samples, these items were also excluded from further analyses. The loading pattern of the remaining items, when compared across samples, still showed some unresolved problems. Items 3, 6, 8, 9, 10, 12, and 14 individually loaded on a particular factor and had no or insignificant loading on other factors. In spite of their considerably high loading on a particular factors, each of the Item 17, 21, 22, 23, 25, 27, and 28, to some extent also loaded on a second factor, with a value which was regarded as significant.

The discrepancy that exists in the pattern of item loadings is an important methodological concern for a comparative study where the scales emerging from these items form the basis of comparison. As a result of this concern, once again the orthogonal factor match procedure was applied to measure the extent to which the Nepalese factor matrix matched the Alberta one. The matrix drawn from the Nepalese data was orthogonally rotated to transform it as closely as possible to the matrix of Alberta sample. The results of this transformation are presented in table 4.13.

Table 4.12

Factor Matrices of Selected Value Statement Items: Results from Alberta and Nepalese Samples

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
1. There is hardly any problem that can't be solved.	.27	.20	-.28	-.03	.74	.01
3. One who stands alone should be admired.	-.01	.66*	.09	.09	.59*	-.20
6. Every person needs to be a non-conformist.	-.20	.51*	.28	-.12	.35*	-.10
7. A job with which you are familiar is always preferable to what is unfamiliar.	.22	.02	.56*	.32	.15	.59*
8. Members of organizations should respect and follow the standards set by their leaders.	.71*	-.04	.07	.73*	-.07	.21
9. Individuals should be prepared to compromise with colleagues in order to achieve consensus.	.31*	.11	-.14	.62*	.08	-.08
10. Members of an organization should strive to acquire similar values and ideals.	.61*	.06	.22	.64*	.03	.16
12. Personal growth and achievement should be the major goal in one's life.	.22	.57*	-.16	.16	.67*	-.22

continued

Table 4.12 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
13. It is difficult to enjoy a social gathering where most of the people are strangers.	-.11	.19	.55*	.26	-.40	.24
14. Every member of society should strive to maintain the established social standards.	.61*	-.02	.02	.69*	-.10	-.22
17. Sanctions imposed by society on those who violate established standards are not as severe as they should be.	.53*	-.11	.18	.47*	-.35	.14
19. It is more fun to tackle a complicated problem than to solve a simple one.	.11	.46*	-.31	-.05	.77*	-.04
21. The pursuit of individual interests is ethical as long as no one is harmed.	-.10	.45*	.00	-.05	.62*	-.44
22. One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting.	.18	.07	.61*	.15	-.42	.59*
23. What a member of an organization needs most is strict discline.	.54*	-.01	.31	.46*	.09	.33
24. In life a person should "go it alone", working on his/her own and trying to make his/her own decisions.	.02	.72*	.05	-.05	.23	.58

continued

Table 4.12 continued

Item	Alberta Sample Factors I	II	III	Nepalese Sample Factors I	II	III
Indicate the extent of your agreement or disagreement with the following statements:						
25. People should not take risks even if the awards appear to be attractive.	.23	.00	.62*	.04	-.46	.58*
26. When one stops repecting athority his/her situation isn't worth much.	.62*	-.11	.17	.53*	-.42	-.15
27. One should not depend on others.	.14	.47*	.21	.19	.45*	-.39
28. Differences in opinion (or conflicting ideas) within organizations do more harm than good.	.35	-.09	.51*	.27	-.39	.17
32. If it were not for the rebellious ideas of youth there would be less progress in the world.	-.19	.45*	-.05	.26	.39*	-.26
Percent of cummulative variance	26.3	38.3	45.8	13.3	38.1	44.7

Note: Asterisks indicate items for scales and factors on which they had highest loading.

Table 4.13

Transformed Factor Matrix of Value Statement Items:
Results from Nepalese Sample

Item No.	Factors I	II	III
3.	-.01	• .61	-.15
6.	-.17	• .33	-.08
7.	.24	.16	• .62
8.	• .71	.05	.25
9.	• .60	.20	-.03
10.	• .61	.13	.21
12.	.04	• .71	-.16
14.	• .71	.04	-.17
17.	• .52	-.27	.15
19.	-.19	• .75	.01
21.	-.14	• .63	-.40
22.	.19	-.43	• .57
23.	• .42	.15	.36
25.	.09	-.48	• .55
26.	• .60	-.31	-.13
27.	.13	• .51	-.35
32.	.21	• .46	-.24

Note: Asterisks indicate items for scales and Factors on which they had highest loading.

The transformed matrix presented in Table 4.13 was, to some extent, closer to the target matrix drawn from the Alberta sample. Yet, the problem of double loading associated with Items 21, 23, 25, 26, and 27 in the original matrix of the Nepalese data in Table 4.13 was not solved altogether. The data of the Alberta sample showed that these same items loaded on only one factor. This may raise questions about the congruence of these two factor matrices. Methodologically, congruency is regarded as one of the fundamental requirements for comparability of scales derived from the items.

The factors emerging from both sets of data were analysed and defined. The definition of the factors are presented in Table 4.14 which shows that the Factors I and II contained seven items each. Only three items were associated with Factor III. The contents of these three sets of items were examined to extract the definition of factors. The seven items associated with Factor I referred to respect for the leader, compromise with colleagues, acquisition of similar

Table 4.14

Definition of Factors of Selected Value Statement Items

Factors	Value Statements	Factor Definition
	Indicate the extent of your agreement or disagreement with the following statements:	
I.	8. Members of organizations should respect and follow the standards set by their leaders. 9. Individuals should be prepared to compromise with colleagues in order to achieve consensus. 10. Members of organizations should strive to acquire similar values and ideals. 14. Every member of society should maintain the established social standards. 17. Sanctions imposed by society on those who violate established standards are not as severe as they should be. 23. What a member of an organization needs most is strict discipline. 26. When one stops respecting authority his/her situation isn't worth much.	Conformity
II.	3. One who stands alone should be admired. 6. Everybody needs to be a non-conformist. 12. Personal growth and achievement should be the major goal in one's life. 19. It is more fun to tackle a complicated problem than to solve a simple one. 21. The pursuit of individual interests is ethical as long as no one is harmed. 27. One should not depend on others. 32. If it were not for the rebelious ideas of youth there would be less progress in the world.	Individualism
III.	7. A job with which you are familiar is always preferable to what is unfamiliar. 22. One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting. 25. People should not take risks even if the awards appear to be attractive.	Tolerance for Uncertainty

values and ideals by the members of organizations, maintenance of established social standards, acceptance of sanctions imposed by society and the need for strict discipline. Based on the ideas reflected from the items, Factor I was defined as conformity (conformity to established social standards, social and organizational authority, and group consensus). Self-reliance, personal achievement, self-respect and individual interest were the ideas reflected from Factor II items. Therefore, individualism was identified as Factor II. Applying a similar interpretation of the content of the items, tolerance for uncertainty was described as the third factor.

D. SCALES FOR THE MEASUREMENT OF VARIABLES

One of the conditions established for the study was that only those scales which measured constructs that were similar in both samples would be used. To a large extent that objective was achieved through the analyses described. To measure centralization, formalization, satisfaction with structure, overall job satisfaction and value orientation, only those items were used which were loaded on similar factors in both samples.

For the measurement of structural centralization and formalization, sets of nine and eight items were chosen. Both sets of items contained three factors. As Table 4.3 shows, centralization of (a) selection and promotion decisions, (b) decisions related to departmental operations, and (c) instructional decisions, were the three factors which emerged from the items developed to measure centralization of decision-making authority in the university organizations. As seen in Table 4.6, performance standards, rules and supervision were the three factors of structural formalization. Based on these findings two different approaches were applied to establish the scales. First, in the analysis of variance and product-moment correlation coefficients tests, all the items selected for the measurement of each of the variables of structure were used as one measure. Second, in the *t* test, which was used to explore differences between the two universities, the three factors of centralization and the three factors of formalization were used as separate scales. In other words, differences between universities were calculated in terms of each of the factors of centralization and formalization.

Eight items used to measure respondents' satisfaction with structure yielded three factors which were (a) satisfaction with administrative practices, (b) satisfaction with performance evaluation and rewards, and (c) satisfaction with discretionary power and freedom. The variable defined as satisfaction with structure was measured by operationalizing all eight items as one measure, and by using the above three factors as separate scales. In other words, (a) respondents' satisfaction with administrative practices, (b) performance evaluation and rewards, and (c) discretionary power and freedom, were explored separately. The scale utilized to measure respondents' overall job satisfaction contained two items.

Table 4.14 indicates that (a) conformity, (b) individualism and (c) tolerance for uncertainty, were the three factors that emerged from the items selected for the measurement of respondents' value orientation. These factors were identified as the dimensions of value orientations. The items associated with each of these three factors were operationalized as a separate scale.

E. SUMMARY

The major purposes of the factor analyses conducted in the study were (a) to explore the underlying factors of the questionnaire items, and (b) to identify a common factor structure emerging from both sets of data. The results of the factor analyses revealed that sets of nine, eight, and eight items respectively were selected to measure centralization of decision-making authority, formalization and satisfaction with structure. The analyses of the items yielded three factors of centralization. These were defined as centralization of selection and promotion decisions, decisions related to departmental operations, and instructional decisions. Similarly, performance standards, rules, and supervision were delineated as the three factors of formalization. Analysis indicated that satisfaction with (a) administrative practices, (b) performance evaluation and rewards, and (c) discretionary power and freedom, were the three underlying factors of the variable identified as satisfaction with structure.

The factor analyses of items designed to measure respondents' value orientation yielded three different factors: conformity, individualism, and tolerance for uncertainty. There were seven items associated with each of the first two factors (i.e., conformity and individualism). The third factor-- tolerance for uncertainty-- comprised three items. These factors were identified as the dimensions of value orientation. All items of each factor were operationalized as one scale.

Chapter V

RESULTS OF DATA ANALYSIS

The results of the analysis are presented in the three major sections of this chapter. In the first section are reported the outcomes of comparative analyses which explored similarities and differences between the University of Alberta (U of A) and Tribhuvan University (TU) on the variables of organizational structure, members' satisfaction and cultural values. This is followed by an examination of differences between the faculties of both universities on members' perceptions of the organizational structure, job satisfaction and the selected dimensions of cultural values. The interrelationship among the variables of structure, satisfaction and cultural values are described in the final section. The findings presented in this chapter address each of the four research questions of the study.

A. ORGANIZATIONAL AND CULTURAL DIFFERENCES

The analysis presented in this section focused on differences and similarities between the University of Alberta and Tribhuvan University on the variables of organizational structure, members' satisfaction and value orientations. Analysis of the data was guided by the following research question:

> What are the similarities and differences between TU and the U of A on perceptions of organizational structure, members' satisfaction and cultural values ?

Three different sets of data analyses were conducted. First, to explore the structural similarities and differences between TU and the U of A, centralization of decision making authority and formalization of organizational activities were analysed as the variables of structure. Then, respondents' satisfaction with structure and their overall job satisfaction were examined. Finally, to investigate the similarities and differences in cultural characteristics of the two

samples, the value orientations of the respondents were analysed. As was indicated in Chapter IV, conformity, individualism and tolerance for uncertainty were the three dimensions of value orientation included in this study. Differences between the two samples were explored in terms of each variable of structure, satisfaction and cultural values.

Cross-Sample Differences on Organizational Structure

Two scales were used to measure the differences in structural centralization and formalization between TU and the U of A. First, the factors of centralization and formalization identified by the factor analysis were used as separate scales. Second, responses to all the questionnaire items selected for the measurement of each of these two variables of structure were compared. The *t* tests were employed to assess the significance of differences between mean scores.

Centralization

The results of the factor analysis indicated a set of three factors related to centralization of decision making authority. These factors referred to centralization of (a) selection and promotion decisions, (b) decisions related to departmental operations, and (c) instructional decisions. By using the items which comprised these factors as separate scales, comparisons were made between the Alberta and Nepalese samples. Table 5.1 shows that there were variations within both the U of A and TU samples in the degree of centralization on the three sets of decision items. The least centralization at the U of A was in the area of instructional decisions while at TU instructional decisions and decisions related to departmental operations were centralized to about the same degree. In both samples, selection and promotion decisions were most highly centralized.

As seen in Table 5.1, decisions related to instruction were considerably less centralized at the University of Alberta (mean=1.34) compared to TU (mean=5.32). In the Alberta sample, the mean centralization of selection and promotion decisions (mean=3.60) was

Table 5.1

Cross-Sample Differences in the Level of Centralization of Decision Making Authority Measured in Terms of Three Factors of Selected Decisions

Factors of Decisions	Alberta Sample			Nepalese Sample			t-value
	Mean	s.d.	N	Mean	s.d.	N	
I. Selection and promotion decisions	3.60	0.80	261	6.30	0.64	207	40.92*
II. Decisions related to departmental operations	3.30	0.83	262	5.30	1.00	207	23.80*
III. Instructional decisions	1.34	0.34	261	5.32	1.07	206	51.15*

* significant beyond the 0.001 level

Original response categories for centralization were made of seven decision making levels of a university.
Higher mean values indicate greater centralization of decision making authority.

significantly lower than that of the Nepalese sample (mean=6.30). Similarly, decisions related to departmental operation at TU were more centralized (mean=5.30) than at the U of A (mean=3.30). Between the two universities, the degree of centralization with regard to each of these three types of decisions was significantly different beyond the 0.001 level.

Cross-sample comparisons in the level of centralization were also made in terms of each of the nine specific decision items which were used to measure centralization. As is indicated in Table 5.2, respondents were asked to indicate the decision making level which had greatest influence over the decisions concerning (a) the approval of a new academic program in a department; (b) changes in general procedures for departmental operations; (c) selection of course content; (d) assignment of final grades in a course; (e) selection of instructional materials; (f) student admission; (g) promotion of a faculty member; (h) selection of new professors; (i) and the department chairman. There were variations within both the Alberta and Nepalese samples in the degree of centralization on the nine specific decisions. At the U of A decisions related to course content, assignment of final grades, and selection of text and reference materials were least centralized, while these decisions were highly centralized at TU. At the U of A, the decision related to the approval of a new academic program in a department was most highly centralized compared to other decisions. At TU, the decisions concerning the promotion of a faculty member, selection of a new professor, and the department chairman were most highly centralized. In contrast, these decisions were less centralized at the U of A. The data revealed that the student admission decision at TU was least centralized compared to other decisions which were analysed.

The mean values presented in Table 5.2 show that all of the nine decisions were highly centralized at TU. However, they were less centralized at the U of A. For example, the analysis revealed that at the U of A the decisions concerning the approval of a new academic program in a department (mean=4.02), and the changes in general procedures for departmental operations (mean=3.05) were less centralized than at TU.

Table 5.2

Differences in Centralization of Decision Making Authority
Between Alberta and Nepalese Samples

Item	Alberta Sample			Nepalese Sample			t-value
	Mean	s.d.	N	Mean	s.d.	N	
Indicate the decision making level which has the greatest influence over decisions concerning:							
3. the approval of a new academic program in a department,	4.02	1.42	255	5.75	1.23	207	14.10*
4. the changes in general procedures for departmental operations,	3.05	0.86	260	5.27	1.26	206	21.60*
6. course content, i.e. areas of subject matter, on which a course should focus,	1.70	0.63	261	5.29	1.14	203	40.19*
7. final grades or marks students are assigned in a course,	1.16	0.40	259	5.43	1.54	204	38.61*
8. selection of text and/or reference materials for a course,	1.16	0.40	261	5.27	1.34	203	42.07*
9. admission of graduate students in a department,	2.83	1.00	261	4.76	1.17	205	18.77*
11. promotion of a faculty member,	3.81	0.97	258	6.40	0.90	205	30.09*
12. selection of a new professor,	3.32	0.90	260	6.10	1.00	205	30.84*
13. selection of the department chairman,	3.60	1.01	258	6.50	0.80	206	34.45*

* significant beyond the 0.001 level

Only those items are included in the table which were used for the measurement of the variable.
Original response categories for decision making levels were the following: 1=Prof; 2=Prof/Dept; 3=Dept; 4=Dept/Fac; 5=Faculty; 6=Fac/Univ; and 7=University.
Higher mean values indicate more centralization.

An interpretation of the mean values is that an individual professor at the U of A exerted greatest influence over the decisions concerning selection of course content, text and reference materials, and assignment of final grades in a course. The results of the analysis revealed that an individual teacher at TU who taught a course had considerably less influence over the selection of course content and text materials, and on the process in which final grades were assigned. On the other hand, the decisions concerning promotion and selection of professors and campus-chiefs at TU were carried out by the units and councils functioning at the university-wide level. The department at the U of A was identified as the most influential administrative level for the selection of its chairman, and for the selection and promotion of faculty members.

A comparative analysis of the Alberta and the Nepalese samples revealed that the organizational structure of TU was more centralized than that of the U of A. The results of the *t* test presented in Tables 5.1 and 5.2 show that the cross-sample differences in the level of centralization with regard to all decisions were significant beyond the 0.001 level.

Formalization

The factor analysis indicated that there were factors of structural formalization: (a) performance standards, (b) rules, and (c) supervision. Each of these factors was operationlized as a separate scale by summing the item values, and differences in the levels of structural formalization between TU and the U of A was calculated. The results of the t tests presented in Table 5.3 reveal that the level of formalization between the two universities was not significantly different in terms of reliance on performance standards. In the Alberta and Nepalese samples, the mean formalization scores of performance standards were 4.91 and 5.00 respectively. However, compared with the U of A, the level of structural formalization of TU was considerably higher in terms of its reliance on (a) administrative and academic rules (mean=5.52), and (b) supervision practices (mean=5.01). In the Alberta sample, the mean values of these two dimensions of structural formalization were 2.82 and 2.80 respectively.

With respects to reliance on rules and supervisory practices, TU and the U of A were significantly different at the 0.001 level.

Differences between the U of A and TU were also calculated in terms of each of the eight items designed to measure structural formalization. The mean formalization scores presented in Table 5.4 indicate that the professors in both universities were well aware of the level of work performance expected by the organization (mean score for Alberta sample=5.23, and for Nepalese sample=5.60), and both universities tended to rely on clearly specified standards of performance to evaluate the work of a professor (mean score for Alberta sample=4.62, for Nepalese sample=4.50). The results of the *t* tests indicated that in such matters, TU and the U of A were not significantly different.

A significant difference was observed, however, when the reliance on rules concerning work schedule, course descriptions and the supervisory practices were considered as the basis of comparison. A comparative analysis of the mean values outlined in Table 5.4 shows that the respondents from Alberta perceived that their work schedule (mean=2.93) in relation to areas such as office hours and when holidays were taken were not governed by prescribed rules to any great extent. At the same time, the Alberta respondents also perceived themselves subjected to relatively few rules that specified the instructional methods and the sequence of topics to be followed in teaching a course(mean=2.70). Data showed that the situation at TU was significantly different. The academic staff perceived the organization as relying heavily on rules concerning office hours and when holidays should be taken (mean=5.53), and what instructional method should be followed in teaching a course (mean=5.54). In addition, they were considerably more occupied with a feeling that they were being watched to see that rules pertaining to the job were obeyed (mean=5.30), that if they violated the work related rules they might face severe sanctions (mean=4.84), and that their work was frequently supervised (mean=4.80). In contrast, the respondents from Alberta perceived that their work was less supervised (mean=3.50), that if they violated the work related rules severe sanctions would not be imposed (mean=2.80), and that they were not watched as closely (mean=2.10).

Table 5.3

Cross Sample Differences in the Level of Formalization
Measured in Terms of Three Related Factors

Factors of Formalization	Alberta Sample			Nepalese Sample			t-value
	Mean	s.d.	N	Mean	s.d.	N	
I. Performance standards	4.91	1.34	260	5.00	1.13	207	0.80
II. Rules (academic and administrative)	2.82	1.21	260	5.52	1.01	207	26.13*
III. Surveillance and supervision	2.80	1.02	260	5.01	1.30	207	20.63*

* significant beyond the 0.001 level

A seven-point scale was used to collect responses concerning the level of formalization. Higher mean values indicate greater formalization of organizational activities.

Table 5.4

Differences in Formalization of Organizational Activities
Between Alberta and Nepalese Samples

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
Indicate the frequency of occurrence of the following circumstances:							
1. Professors know what level of work performance is expected.	5.23	1.40	257	5.60	1.29	207	2.61
2. The standard of performance on which each professor's work is evaluated is clearly specified.	4.62	1.54	260	4.50	1.81	207	1.05
3. A professor's work schedule in relation to areas such as office hours and when holidays are taken, is governed by prescribed rules.	2.93	1.50	258	5.53	1.40	206	19.07*
4. Course descriptions specify instructional methods and sequence of topics a professor should follow in teaching a course.	2.70	1.50	258	5.54	1.23	207	22.61*
5. Professors frequently feel that they are being watched to see that rules pertaining to the job are obeyed.	2.10	1.03	259	5.30	1.40	207	27.29*
6. Sanctions for violating rules and procedures pertaining to a professor's job are severe.	2.80	1.38	255	5.15	1.45	206	17.60*
7. The work of a professor is frequently supervised or evaluated to see that it measures up to prescribed standards.	3.50	1.70	255	4.80	1.80	207	7.88*
8. When a Professor is discovered violating a work related rule, severe sanctions are imposed.	2.80	1.32	251	4.84	1.60	207	15.02*

* significant beyond the 0.001 level

There were seven response categories to indicate the frequency of occurrence of circumstances: 1=Never; and 7=Always. Higher mean values indicate more formalization.

The above results clearly show that there were considerable differences between the two university organizations in terms of the degree of centralization of decision making authority and the level of formalization of organizational activities.

Differences in Satisfaction Across Samples

Satisfaction with structure and overall job satisfaction were measured as two separate variables. Attempts were made to explore differences between the respondents in the two samples in terms of these two variables.

Satisfaction with Structure

As is described in Chapter IV, a set of three factors emerged from the analysis of eight questionnaire items designed to measure respondents' satisfaction with structure. These factors were satisfaction with (a) administrative practices, (b) performance evaluation and rewards, and (c) discretionary power and freedom. Each of these factors was used as a separate sacle by summing item values. These scales then were operationlized to calculate differences between the two samples. The results presented in Table 5.5 indicate that the Nepalese respondents expressed low satisfaction with the amount of discretionary power and freedom allowed in their work (mean=3.02), with administrative practices (mean=2.71), and with the way their performance was evaluated and rewards were given (mean=2.41). In all these matters, the respondents from the U of A were more highly satisfied. As the mean satisfaction with structure scores presented in Table 5.5 indicate, they were generally satisfied with (a) the amount of discretionary power permitted in their work (mean=6.10), (b) the way their performance was rewarded (mean=5.00), and (c) administrative practices (mean=4.80). The results of the *t* tests indicated that in terms of all three factors, the level of satisfaction experienced by the Nepalese and the Alberta respondents was significantly different at the 0.001 level.

Table 5.5

Cross Sample Differences in the Level of Satisfaction with Structure Measured in Terms of Three Related Factors

Factors of Satisfaction with Organizational Structure	Alberta Sample			Nepalese Sample			t-value
	Mean	s.d.	N	Mean	s.d.	N	
I. Satisfaction with administrative practices.	4.80	1.10	259	2.71	1.10	207	20.46*
II. Satisfaction with performance evaluation and rewards.	5.00	1.40	259	2.41	1.10	207	22.69*
III. Satisfaction with discretionary power and freedom.	6.10	0.83	259	3.02	1.33	206	28.68*

* significant beyond the 0.001 level

There were seven response categories to indicate the level of satisfaction: 1=very dissatisfied, and 7=very satisfied.
Higher mean values indicate greater satisfaction.

Table 5.6

Differences in Satisfaction with University Structure
Between Alberta and Nepalese Professors

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
How satisfied are you with:							
2. the way academic and administrative policies are put into practice.	4.61	1.50	256	2.67	1.40	206	14.54*
3. the way in which the rules are emforced.	4.93	1.30	256	2.70	1.25	204	19.05*
4. the extent of your participation in the decision making process at the department level.	5.44	1.32	258	2.82	1.50	205	19.95*
5. the amount of say or influence you have in university level decisions that affect you.	4.15	1.60	258	2.61	1.40	206	11.25*
6. the amount of discretionary power you have in decisions concerning classroom teaching and research.	6.43	0.80	258	3.13	1.50	203	28.87*
7. your freedom to introduce new ideas into the departmental activities.	5.70	1.23	259	2.90	1.53	205	21.26*
8. the procedures under which your performance is evaluated.	5.12	1.41	259	2.43	1.32	206	21.13*
9. the rules and standards applied in salary and promotion decisions.	4.90	1.50	259	2.41	1.24	206	18.98*

* significant beyond the 0.001 level
Item one was not used for the measurement of the variable, therefore it is excluded from the table.
There were seven response categories to indicate satisfaction: 1=very dissatisfied; and 7=very satisfied.
Higher mean values indicate greater satisfaction with structure.

Eight items were used to measure satisfaction with structural centralization and formalization. Respondents' satisfaction with university structure was compared in terms of each of these items. The mean satisfaction scores presented in Table 5.6 indicate that the respondents from Alberta were significantly more satisfied than their Nepalese counterparts with the way policies were put into practice and the rules were implemented in their organization. They also demonstrated a high level of satisfaction with the extent of their participation in the decision making process at the department level, and with the amount of say they had in the university level decisions that affected them professionally. A considerable difference was found between the Nepalese and the Alberta respondents with regard to their satisfaction with the procedures under which their performance was evaluated and rewards were given; the means are 2.43 and 5.12 respectively. Furthermore, the Alberta respondents indicated a significantly higher satisfaction with the amount of discretionary power they exercised in research and teaching related decisions (mean=6.43) and the freedom they felt to introduce new ideas in their work place (mean=5.70). The Nepalese respondents indicated low satisfaction in both of these areas (means=3.13 and 2.90). The results of the *t* tests revealed that the differences in satisfaction with structure between the two samples were significant beyond the 0.001 level.

Overall Job Satisfaction

Two items were used to measure the overall job satisfaction experienced by the members of the universities. As seen in Table 5.7, the respondents from Alberta indicated that they were highly satisfied with their job (mean=5.90) and with the general conditions under which they worked (mean=5.61). On the other hand, the Nepalese respondents were less satisfied with their job (mean=3.30) and with the general conditions of their work (mean=2.73). The mean scores of satisfaction of the Alberta and the Nepalese samples were significantly different beyond the 0.001 level.

Table 5.7

Cross Sample Differences in Overall Job Satisfaction

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
Considering all aspects of your work:							
1. how satisfied are you with your job?	5.90	1.20	259	3.30	1.40	206	21.70*
2. how satisfied are you with the general conditions under which you work?	5.61	1.30	259	2.73	1.32	206	23.80*

* significant beyond the 0.001 level

There were seven response categories to indicate the level of overall job satisfaction: 1=very dissatisfied, and 7=very satisfied.
Higher mean values indicate greater satisfaction.

The results presented in Tables 5.5, 5.6, 5.7 show that the professors in Canada were significantly more satisfied with the overall conditions of their job, and with the way their organization was structured than were their Nepalese counterparts.

Value Related Differences Across Samples

Seventeen items were used to measure respondents' value orientations. From the factor analysis of these items, three sets emerged: (a) conformity, (b) individualism, and (c) tolerance for uncertainty. The items associated with each of these three factors were operationalized as a separate scale to measure differences and similarities between the Alberta and the Nepalese samples.

Conformity

Seven items constituted the scale which was used to measure respondents' conformity. The term conformity is defined as the respondents' tendency to display regard or respect for established social standards, social and organizational authority, and group consensus. The results presented in Table 5.8 indicate that the conformity demonstrated by the Alberta respondents differed significantly from that of the Nepalese respondents. For example, the Nepalese respondents indicated their agreement with the statement that members of organizations should respect and follow the standards set by their leaders (mean=5.40). The mean score (3.60) presented in the table reveals that the respondents from Alberta were less in agreement with the statement. Both the Alberta and the Nepalese respondents perceived that individuals should be prepared to compromise with colleagues in order to achieve consensus (mean=4.90 and 5.50 respectively). However, the extent of their agreement with the notion was significantly different at the 0.001 level. The findings presented in Table 5.8 reveal that the respondents from the U of A indicated less agreement with the statements that members of an organization should strive to acquire similar values and ideals (mean=3.15), sanctions imposed by society on those who violate established standards are not as severe as they should be

Table 5.8

Cross Cultural Differences in Conformity

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
Indicate the extent of your agreement or disagreement with the following statements:							
8. Members of organizations should respect and follow the standards set by their leaders.	3.60	1.32	253	5.40	1.50	200	13.60*
9. Individuals should be prepared to compromise with colleagues in order to achieve consensus.	4.90	1.34	256	5.50	1.35	198	4.69*
10. Members of an organization should strive to acquire similar values and ideals.	3.15	1.40	252	5.50	1.34	198	17.93*
14. Every member of society should strive to maintain the established social standards.	3.50	1.50	253	5.61	1.30	197	16.61*
17. Sanctions imposed by society on those who violate established standards are not as severe as they should be.	3.40	1.40	252	5.20	1.50	195	13.16*
23. What a member of an organization needs most is strict discipline.	2.20	1.20	254	5.60	1.50	190	20.76*
26. When one stops respecting authority his/her situation isn't worth much.	2.90	1.43	249	5.20	1.60	191	15.47*

* significant beyond the 0.001 level

There were seven response categories to indicate the level of disagreement or agreement with the above statements: 1=strongly disagree, and 7 strongly agree.
Higher mean values indicate greater respect for established social standards, authority and group consensus.

(mean=3.40), and every member of society should strive to maintain the established social standards (mean=3.50) than did the Nepalese respondents. The Nepalese respondents perceived a greater need for strict discipline in an organization (mean=5.60), while the Alberta respondents tended to disagree with the statement (mean=2.20).

The above findings indicate that significant differences exist between the two groups of respondents with regard to their conformity to social and organizational standards and authority.

Individualism

The scale operationalized to measure respondents' orientation toward individualism comprised seven questionnaire items. The cross-sample differences in respondents' individualism were measured separately in terms of each of the seven items.

The results of the *t* tests presented in Table 5.9 revealed that the Alberta respondents differed significantly from the Nepalese respondents on all items except Item 32. The two groups of respondents were not different in terms of the importance they placed on the rebellious ideas of youth as a factor of progress. The respondents from the U of A were more in agreement with all statements which were used to measure individualism except the statements in Item 6 and 27. They indicated less agreement with the views that every person needs to be a non-conformist, and one should not depend on others. The Nepalese respondents showed less agreement with individualism items with an exception of Items 27. They tended to agree that one should not depend on others.

A comparison of the two sets of results presented in Table 5.9 reveals that the respondents from Alberta indicated more agreement with the view that it is more fun to tackle a complicated problem than to solve a simple one (mean=5.32) than did their Nepalese counterparts (mean=3.50). The Nepalese respondents indicated less agreement with the statements that (a) personal growth and achievement should be the major goal in one's life (mean=3.53), and (b) the pursuit of individual interests is ethical as long as no one is harmed

Table 5.9

Cross Cultural Differences in Individualism

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
Indicate the extent of your agreement or disagreement with the following statements:							
3. One who stands alone should be admired.	4.35	1.34	249	3.40	1.84	201	6.35*
6. Every person needs to be a non-conformist.	3.30	1.60	253	2.74	1.50	191	3.55*
12. Personal growth and achievement should be the major goal in one's life.	4.90	1.50	253	3.53	2.04	200	7.73*
19. It is more fun to tackle a complicated problem than to solve a simple one.	5.32	1.40	256	3.50	2.04	198	10.78*
21. The pursuit of individual interests is ethical as long as no one is harmed.	4.93	1.65	254	3.60	2.00	195	7.70*
27. One should not depend on others.	3.48	1.60	255	4.24	1.90	195	4.51*
32. If it were not for the rebellious ideas of youth there would be less progress in the world.	4.33	1.60	252	4.05	1.60	196	1.84

* significant beyond the 0.001 level

There were seven response categories to indicate the level of disagreement or agreement with the above statements: 1=strongly disagree, and 7=strongly agree.
Higher mean values indicate greater orientation towards individualism.

(mean=3.60) while the Alberta respondents were more in agreement with these statements. Compared to their Nepalese counterparts, the respondents from Alberta indicated significantly more agreement with the statement that one who stands alone should be admired (means=3.40 and 4.35 respectively).

These results indicate that the Alberta respondents had a higher orientation towards individualism than the Nepalese respondents.

Tolerance for Uncertainty

The scale used to measure respondents' tolerance for uncertainty comprised three questionnaire items. To explore the cross-sample differences and similarities, the analysis was carried out on the basis of each of these three items.

The results of the *t* tests indicated that the respondents from Alberta differed significantly from their Nepalese counterparts on all the three items used to measure the tolerance for uncertainty. The respondents from the U of A were less in agreement with all the tolerance for uncertainty items. Their rsponses could be interpreted as indicating views that a familiar job is not necessarily preferable (mean=5.00), that joining an organization committed to providing lifelong employment may not be desirable (mean=5.61), and that one should take risks if the rewards are attractive (mean=5.80). In contrast, The mean scores presented in Table 5.10 indicate that the respondents from Alberta demonstrated more tolerance for uncertainty when compared with their Nepalese counterparts. The Nepalese respondents perceived that a familiar job should be preferred (mean=2.70), that one should not take risks lured by the possibility of big awards (mean=3.31), and that one should join an organization committed to providing lifelong employment (mean=3.40). Such perceptions indicate that the Nepalese respondents had low tolerance for uncertainty.

These results indicated that the outlook of the two groups of respondents concerning the above mentioned views was significantly different at the 0.001 level. Significant value related differences appear to exist between the Alberta and the Nepalese respondents.

Table 5.10

Cross Cultural Differences in Tolerance for Uncertainty

Item	Alberta Sample Mean	s.d.	N	Nepalese Sample Mean	s.d.	N	t-value
Indicate the extent of your agreement or disagreement with the following statements:							
7. A job with which you are familiar is always preferable to what is unfamiliar.	5.00	1.43	255	2.70	1.50	197	16.52*
22. One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting.	5.61	1.30	253	3.40	2.02	197	13.64*
25. People should not take risks even if the awards appear to be attractive.	5.80	1.14	254	3.31	2.10	191	14.83*

* significant beyond the 0.001 level

There were seven response categories to indicate the level of agreement or disagreement with the above statements: 1=strongly agree, and 7=strongly disagree (the scale was reversed).
Higher mean values indicate greater tolerance for uncertainty.

Summary of Differences Between the Two Samples

The findings outlined in Table 5.11 provide a brief summary of all the analyses reported in this section. The results of the *t* tests presented in the table shows that TU and the U of A were significantly different in terms of organizational structure and job satisfaction. Moreover, the value orientations of the academic staff of these two organizations were also significantly different. The results show that the University of Alberta was perceived as having relatively low centralization (mean=2.73) and formalization (mean=3.33). Compared with the U of A, the Nepalese university organization was more centralized (mean=5.62) and more formalized (mean=5.12). In terms of structural centralization and formalization, the differences between the two universities were significant beyond the 0.001 level. Moreover, the respondents in the two settings had different levels of satisfaction with structure as well as with the job itself. Table 5. 11 indicates that the job satisfaction of the Alberta respondents (mean=5.75) was significantly higher than that of the Nepalese respondents (mean=3.01). This also applies to respondents' satisfaction with structure. The Alberta respondents were generally satisfied with the structure of the organization in which they worked while the Nepalese respondents tended to be less satisfied with the way their organization was structured.

Respondents across the two settings demonstrated markedly different value orientations. The table indicates that the mean conformity score of the Nepalese respondents (mean=5.40) was significantly higher than that of the Alberta respondents (mean=3.37). The respondents in the Alberta sample indicated comparatively more tolerance for uncertainty and more orientation toward individualism (mean=5.43) while, the Nepalese respondents were less individualistic (mean=3.57), and had less tolerance for uncertainty (mean=3.10). The results of the *t* tests indicate that the cross-sample differences on value orientations were significant beyond the 0.00 level.

Table 5.11

Differences in Measures of Organization and Culture Related Variables

	Alberta Sample			Nepalese Sample			
	Mean	s.d.	N	Mean	s.d.	N	t-value
Centralization	2.74	0.50	261	5.62	0.65	207	53.35*
Formalization	3.33	0.77	260	5.12	0.90	207	22.93*
Satisfaction with Structure	5.20	0.92	259	2.71	0.93	207	28.43*
Job Satisfaction	5.74	1.10	259	3.01	1.21	206	25.38*
Conformity	3.37	0.83	256	5.40	0.90	201	25.09*
Individualism	4.37	0.80	257	3.57	1.30	204	7.88*
Tolerance for Uncertainty	5.43	1.00	256	3.10	1.42	201	20.02*

* significant beyond the 0.001 level

B. DIFFERENCES ACROSS FACULTIES IN A UNIVERSITY

The differences between the faculties at Tribhuvan University and at the University of Alberta were investigated separately on the variables of organizational structure, satisfaction and values. Through this analysis, the second research question was addressed:

> What are the similarities and differences between faculties at TU and the U of A on the variables of organizational structure, satisfaction, and cultural values ?

The purpose of the analyses reported in this section was to compare the pattern of differences between the two universities with the pattern of differences between the four faculties of a university. The analysis was necessary in order to test the validity of the culturalist assumption that differences in members' perceptions of two organizations located across cultures can be attributed to distinct cultural forces. If this assumption is valid, then perceptions of individuals within one organization will not differ significantly because they share the same cultural values. However, if there are differences in perceptions among individuals within one organization, the validity of the assumption may seem problematic. Such findings will indicate that perceptual differences can not be attributed to cultural forces only.

The members of four different faculties of TU and the U of A participated in this study: arts, education, sciences, and business. For the purposes of this analysis, the respondents from these faculties were identified as four different groups. By using the analysis of variance technique, differences between the groups were calculated in terms of their perceptions of the levels of structural centralization and formalization, their overall job satisfaction, their satisfaction with the way the organizations were structured, and their value orientations. Conformity, individualism, and tolerance for uncertainty were operationalized as the three variables of value orientation. The Scheffé test was applied to identify the groups (faculties) which were significantly different. The groups that were not significantly different were assumed to be similar.

As Table 5.12 indicates, the members of the Faculty of Business at the University of Alberta perceived the university as a more centralized organization compared with the members

of the Faculties of Arts, Education and Sciences. The mean centralization score of the Faculty of Business was significantly different from other faculties at the 0.100 level. Similarly, the members of the Faculty of Business and Commerce in Tribhuvan University perceived that their organization was more centralized than did their colleagues in other faculties. However, the level of centralization perceived by the Faculty of Business and Commerce was significantly different only from the Faculty of Social Sciences and Humanities (Arts).

Table 5.13 displays some additional differences between the faculties the two universities. In the Alberta sample, the members of the Faculty of Business were less satisfied with the structure of their organization compared with the other three faculties. The mean satisfaction with structure score of the Faculty of Business was significantly different only from the Faculty of Arts. As Tables 5.13 and 5.14 indicate, the members of the Faculty of Education at TU were least satisfied of all. However, the mean satisfaction with structure and the mean job satisfaction scores of the Faculty of Education were significantly different at the 0.100 level only from the Faculty of Arts. Apart from these particular differences observed in the measures of centralization, satisfaction with structure and job satisfaction, faculties at both universities were not different in terms of other variables.

In summary, the differences mentioned above may be seen as exceptions if these significant differences are compared with the number of insignificant or non differences observed between the groups in several other analyses (see Appendix D). For instance, the faculties at both universities were not significantly different in terms of their perception of formalization of organizational activities and their orientation toward the selected values. Respondents from different faculties at TU and the U of A were not significantly different in terms of their job satisfaction except the Arts and Education faculties at TU. Even on centralization of decision making authority, where the Faculty of Business at both universities showed significant differences from other faculties, most of the other faculties when compared between themselves were not significantly different. Moreover, the same faculty (Business) made a substantial contribution to the differences observed between faculties on satisfaction

Table 5.12

Results of One-Way Analysis of Variance of Centralization of Decision Making Authority Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	87	2.73	0.42	9.40**	2-4, 3-1,
	2. Education	59	2.83	0.56		3-2, 3-4
	3. Business	29	3.12	0.46		
	4. Science	84	2.60	0.40		
Nepalese	1. Arts	67	5.31	0.69	3.78**	3-1
	2. Education	48	5.37	0.66		
	3. Business	45	5.66	0.31		
	4. Science	47	5.47	0.44		

** significant beyond 0.01 level.

Higher mean value indicates greater centralization experienced by a faculty.

Table 5.13

Results of One-Way Analysis of Variance of Satisfaction with Structure Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	87	5.30	0.81	3.75**	1-3, 2-3
	2. Education	59	5.23	0.93		
	3. Business	28	4.68	0.98		
	4. Science	84	5.08	0.95		
Nepalese	1. Arts	67	2.92	0.96	2.81*	1-2
	2. Education	48	2.45	0.80		
	3. Business	45	2.80	0.85		
	4. Science	47	2.61	1.00		

* significant beyond 0.05 level.
** significant beyond 0.01 level.

Higher mean value indicates greater satisfaction with structure felt by a faculty.

Table 5.14

Results of One-Way Analysis of Variance of Overall Job Satisfaction Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	87	5.86	0.96	2.24	None
	2. Education	59	5.87	1.08		
	3. Business	28	5.30	1.31		
	4. Science	83	5.66	1.16		
Nepalese	1. Arts	67	3.31	1.25	2.70*	1-2
	2. Education	48	2.71	1.24		
	3. Business	45	3.03	1.10		
	4. Science	47	2.87	1.18		

* significant beyond 0.05 level.

Higher mean value indicates greater job satisfaction felt by a faculty.

with structure and job satisfaction.

The findings of the analyses indicate that, with only a few exceptions, the faculties at TU and the U of A were not significantly different from each other. This justified analyzing data for all faculties combined rather than necessitating an analysis by individual faculties.

C. INTERRELATIONSHIPS AMONG VARIABLES

As has been mentioned earlier, centralization and formalization were measured as the variables of university structure. Similarly, members' satisfaction with structure and their overall job satisfaction were analysed as two separate variables. In addition to these two sets of organizational variables, three different dimensions of value orientations were investigated as three variables of culture. One of the objectives of this study was to explore cross-sample differences and similarities in the pattern of relationships among the variables. The findings of this exploration are presented in this section which address the third and fourth research questions:

> What are the relationships among the variables of organizational structure, satisfaction, and cultural values at TU and the U of A ?

and

> What are the similarities and differences between TU and U of A in terms of relationships among the variables of organizational structure, satisfaction, and cultural value ?

The pattern of interrelationship among the variables was analysed by applying two different analytical procedures. First, the Pearson correlation coefficient was used to measure the relationships among the variables. Second, to explore the pattern of relationships further, the respondents of each samples were divided into different groups on the basis of their responses to the variables. For example, based on their responses to the items used for the measurement of individualism, the respondents of each sample were divided into less individualistic and more individualistic groups. Attempts were then made to explore the degree of formalization as perceived by these groups. Such an analysis revealed some useful aspects of relationship among variables, such as between individualism (a variable of culture) and

formalization (a structural variable).

Correlational Analysis of Variables Across Samples

In order to explore the relationship among the variables, correlational analyses were conducted for the two sets of data acquired from the two different samples.

Table 5.15 indicates that in the Alberta sample respondents' satisfaction with structure was positively correlated with their job satisfaction (0.70), and tolerance for uncertainty was negatively correlated with conformity (-0.40). Other variables were not significantly correlated with each other. In the Nepalese sample, positive correlations were observed between (a) satisfaction with structure and job satisfaction (0.74) (b) individualism and job satisfaction (0.45), and (c) individualism and satisfaction with structure (0.46). Furthermore, individualism demonstrated a negative relationship with centralization (-0.42) and formalization (-0.51). A positive correlation was found between tolerance for uncertainty and individualism (0.53). However, the same variable (tolerance for uncertainty) had a negative relationship with centralization (-0.37), formalization (-0.42) and conformity (-0.30). The results presented in Table 5.15 reveal that the level of centralization perceived by the Nepalese respondents was positively correlated with formalization (0.30) and conformity (0.23), and was negatively related with job satisfaction (-0.25) and satisfaction with structure (-0.25). Since the values of correlations were 0.30 or less, this indicated that centralization had a weak relationship with formalization, conformity, and the two variables of satisfaction.

All the correlations described above were statistically significant beyond the 0.001 level. However, the percentage of variance explained by some of these correlations was very low. For example, in the Alberta sample satisfaction with structure was positively related to formalization of organizational activities (0.25). Yet, the value of the correlation did not explain a substantial variance. As mentioned earlier, in the Nepalese sample centralization of decision making authority was negatively correlated with job satisfaction and satisfaction with structure, and was positively correlated with conformity. The percentage of variance explained

Table 5.15

Relationship Among Organization and Culture Related Variables: Results from Alberta and Nepalese Samples

Sample		Centralization	Formalization	Satisfaction with Structure	Job Satisfaction	Conformity	Individualism
Alberta	Formalization	.10					
	Satisfaction with Structure	-.08	.25*				
	Job Satisfaction	-.11	.14	.70*			
	Conformity	.01	.18	.10	.16		
	Individualism	.02	.02	-.03	.01	-.02	
	Tolerance for Uncertainty	-.03	-.06	.14	.06	-.40*	-.08
Nepal	Formalization	.30*					
	Satisfaction with Structure	-.25*	-.10				
	Job Satisfaction	-.25*	-.06	.74*			
	Conformity	.23*	.21	.00	.05		
	Individualism	-.42*	-.51*	.46*	.45*	-.14	
	Tolerance for Uncertainty	-.37*	-.42*	.20	.23	-.30*	.53*

Note: An asterisk indicates probability greater than .001.

by these correlation values was only in the order of 5 or 6 percent. After a careful consideration of the results, the decision was made to accept only those values that were an absolute value of .30 or above as significant correlations. In order to make the pattern of correlation more distinct and easier to read, the correlation values that were less than an absolute value of .30 are excluded from Table 5.16.

A comparison of the two sets of results in Table 5.16 indicates that in spite of dissimilarities, some similarities between the two samples were present. In both samples respondents' overall job satisfaction was positively related with their satisfaction with structure. Moreover, in both samples respondents' tolerance for uncertainty was negatively correlated with their conformity to social and organizational standards and authority. Tables 5.6, 5.7, 5.8, 5.10 and 5.11 illustrate the point more clearly. Tables 5.6 and 5.7 show that the Alberta respondents were generally satisfied with the way their organization was structured and with the overall condition of the job. On the other hand, the Nepalese respondents tended to be less satisfied with both the job and the structure of their organization. Furthermore, the respondents from Alberta were more tolerant of uncertainty and expressed less conformity to social and organizational standards and authority while the Nepalese respondents were less tolerant of uncertainty and expressed more conformity to social and organizational standards and authority. Cross-cultural similarity was indicated by the positive correlation between the two types of satisfaction scores, and the negative relationship between the respondents' tolerance for uncertainty and their conformity to social and organizational standards and authority observed in both samples.

The above analysis revealed that the two variables of satisfaction (i.e., satisfaction with structure and job satisfaction), and the two variables of values (i.e., conformity, and tolerance for uncertainty) demonstrated a similar pattern of relationship across the two samples. Despite these similarities, a number of other variables analysed in the study showed different patterns of relationship across samples. As the results presented in Table 5.16 indicate, centralization perceived by the Nepalese respondents was positively related to formalization. The analysis of

Table 5.16

Relationship Among Organization and Culture Related Variables:
Results from Alberta and Nepalese Samples

Sample		Centrali-zation	Formali-zation	Satisfaction with Structure	Job Satis-faction	Conformity	Individu-alism
Alberta	Formalization						
	Satisfaction with Structure						
	Job Satisfaction			.70*			
	Conformity						
	Individualism						
	Tolerance for Uncertainty					-.40*	
Nepal	Formalization	.30					
	Satisfaction with Structure						
	Job Satisfaction			.74*			
	Conformity						
	Individualism	-.42	-.51	.46	.45		
	Tolerance for Uncertainty	-.37	-.42			-.30*	.53

Only those correlations with an absolute value of .3 or greater are presented.
An asterisk indicates significant correlations observed in both samples.

data acquired from the Alberta sample revealed that centralization was not significantly related with formalization (value of orrelation=0.10). In the Nepalese sample, individualism was significantly correlated with centralization, formalization, satisfaction with structure, and job satisfaction. However, in the Alberta sample, individualism was not related significant to these four variables.

The above findings indicate the cross sample similarities as well as dissimilarities in the relationships among the variables. As mentioned above, two different scores of satisfaction in both samples were positively related to each other, and tolerance for uncertainty across both samples was negatively correlated with conformity to social and organizational standards and authority. Apart from these similarities, other variables demonstrated their relationships differently across samples.

Exploration of Relationships Among Variables by the Analysis Group Responses

Correlational analysis is the commonly used technique to explore relationships between variables. In this study, attempts were made to explore some additional dimensions of relationships between variables which cannot be explained by a correlational analysis. As the conceptual framework described in Chapter II indicated, this study began with an assumption that the dimensions of cultural values (as the independent variables) affect and/or are related to the variables of organizational structure. Similarly, the variables of organizational structure (as independent variables) affect and/or are related to members' satisfaction. A complementary assumption can be made that two groups of respondents within one sample -- those who expressed high conformity for social and organizational standards and authority, and those who did not -- should perceive the degree of structural centralization and formalization differently. Similarly, a group of respondents who perceived their university as a more centralized organization and the other group of the same sample who did not, may experience different levels of job satisfaction and satisfaction with structure.

As a further test of the relationship between the variables of cultural values (as independent variables) and the variables of organizational structure, the respondents from each sample were divided into two groups. These groups were formed on the basis of the responses given to a cultural variable. The mean score of a variable of cultural values was used to divide the two groups of respondents in both samples. For example, the respondents of each sample who were less tolerant of uncertainty were identified as Group I and those who were more tolerant of uncertainty were identified as Group II. Attempts were then made to measure the level of formalization as perceived by each of these groups. The investigation of such group perceptions, in effect, revealed the pattern of relationship between tolerance for uncertainty and formalization.

Exploration of Relationships Among Variables of Culture
and Structure by the Analysis of Responses of Two Groups

Following the procedures described above, three different analyses were conducted. In each of these analyses, responses to a variable of cultural values formed the basis of the group division. After the groups were divided, each group's perception concerning structural centralization and formalization was measured.

In the first of the following three analyses respondents were divided into two groups on the basis of their responses to conformity items. The mean score of conformity was used to divide respondents into two groups, that is, the above the mean and below the mean groups. Then, attempts were made to explore the pattern in which the two groups -- Group I (less inclined to conform to social and organizational standards and authority) and Group II (more inclined to conform to social and organizational standards and authority) -- perceived the level of centralization of their university organization. Table 5.17 shows that Group I of the Alberta sample, which had lower orientation to conformity, constituted approximately forty-eight percent (N=126) of the sample. Fifty percent (N=131) indicated that they were more inclined to conform to social and organizational standards and authority. The mean centralization score of Group I of the Alberta sample (mean=2.70) was lower than that of Group II

Table 5.17

Two Groups of Respondents' Perceptions of Centralization
Measured in Relation to Conformity

Alberta Sample		Nepalese Sample	
	Centralization (Total Sample, Mean=2.74, N=261)		Centralization (Total Sample, Mean=5.62, N=207)
Higher Conformity (Mean=3.37)	Group II (N=131) Mean=2.78	Higher Conformity (Mean=5.40)	Group II (N=133) Mean=5.74
Lower Conformity	Group I (N=126) Mean=2.70	Lower Conformity	Group I (N=68) Mean=5.40
	Level of Significance of Difference between the Groups=0.196		Level of Significance of Difference between the Groups=0.001

Note: The two groups of respondents are divided on the basis of their responses to conformity.

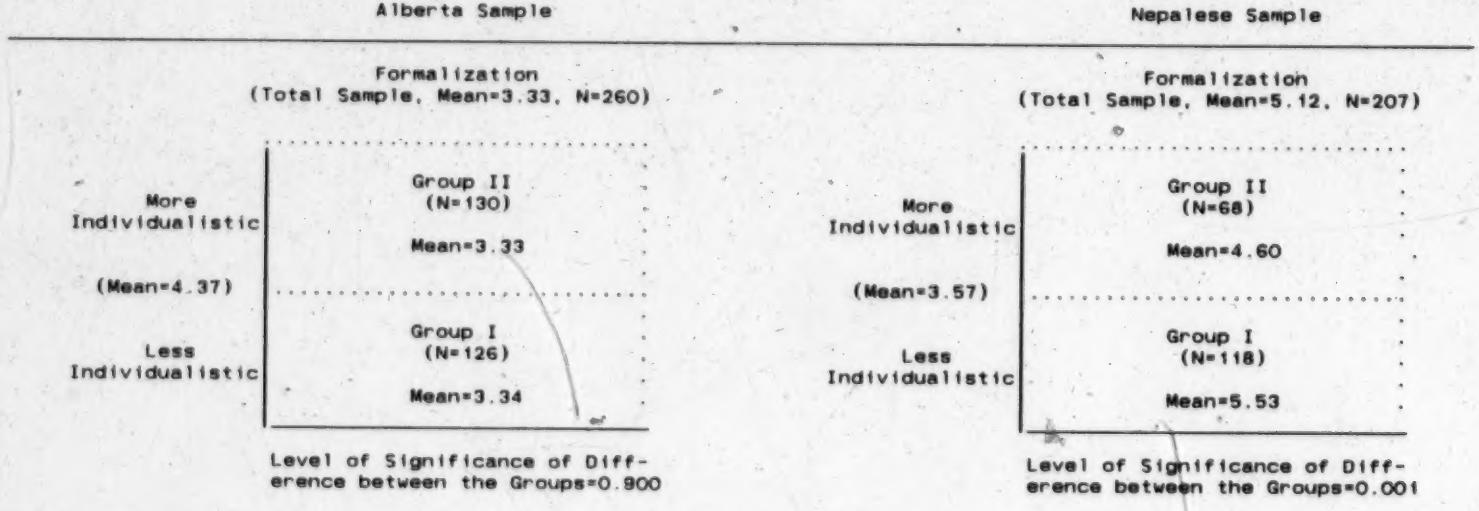
(mean=2.78). However, the *t* test indicated that the mean centralization scores of these two groups were not significantly different at the 0.10 level. The result can be interpreted that the level of conformity perceived by the Alberta respondents was not related to their perception of the degree of centralization.

In the Nepalese sample, sixty-four percent (N=133) of the respondents indicated that they were more inclined to conform to social and organizational standards and authority (Group II) and thirty-three percent (N=68) indicated that they were less inclined to conform to social and organizational standards and authority (Group I). The mean centralization scores presented in the table reveal that the respondents in Group I of the Nepalese sample perceived lower degree of centralization (mean=5.40) compared to Group II (mean=5.74). The result of the *t* test indicated that the two groups were significantly different at the 0.001 level. The respondents in Group II demonstrated higher degree of conformity for social and organizational standards and authority. At the same time, they perceived significantly more centralization in their university than did the respondents in Group I. As mentioned above, the respondents in Group I indicated less conformity for social and organizational standards and authority. This indicates that in the Nepalese sample the level of conformity had a significant relationship with centralization.

In the second analysis, respondents' orientation toward individualism and their perception of formalization were investigated. Following the criteria described earlier, the respondents of each sample were divided into two groups. Group I was made up of those who were low on individualism. The respondents who were high on individualism were identified as Group II. Table 5.18 indicates that fifty percent (N=130) of the Alberta respondents were included in Group II, and forty-eight percent (N=126) were in Group I. The mean formalization scores of these two groups indicate that the more individualistic respondents of the Alberta sample (Group II) perceived a lower degree of structural formalization (mean=3.33) than did the respondents who were less individualistic (mean=3.34). The result of the *t* test reveals that the mean formalization scores of the two groups were not significantly

Table 5.18

Two Groups of Respondents' Perceptions of Formalization Measured in Relation to Their Individualistic Orientation



Note: The two groups of respondents are divided on the basis of their responses to individualism.

different at the 0.10 level. The results are consistent with those of the correlational analysis.

In the Nepalese sample fifty-seven percent (N=118) of the respondents had indicated that they were less individualistic and thirty-three percent (N=68) were more individualistic. The mean formalization scores presented in Table 5.18 reveal that the respondents in Group I of the Nepalese sample (who indicated that they were less individualistic) perceived a higher degree of formalization (mean=5.53) when compared with Group II (mean=4.60). The result of the *t* test shows that these two groups were significantly different at the 0.001 level. On the basis of the findings it can be interpreted that in the Nepalese sample individualism as a variable of culture was negatively related to the perceived degree of formalization. Moreover, Table 5.18 shows that the mean formalization scores of the Nepalese groups were considerably higher (Group I mean=5.53 and Group II mean=4.60) than the groups of the Alberta sample (Group I mean=3.34 and Group II mean=3.33).

The final analysis reported in this section investigated the relationship between the degree of formalization perceived by the respondents and their tolerance for uncertainty. The respondents of each sample were divided into two groups. The respondents who indicated less tolerance for uncertainty were included in Group I and those who indicated more tolerance for uncertainty were included in Group II. As Table 5.19 indicates, fifty-one percent (N=133) of the respondents from Alberta were in Group II and approximately forty-six percent (N=122) were in Group I. The values of mean formalization of Group I and Group II were 3.34 and 3.33 respectively. The result of the *t* test indicated that the mean formalization scores of these two groups were not significantly different at the 0.10 level. Since the two groups of the Alberta sample were not significantly different in terms of their perception of the level of formalization, it can be concluded that tolerance for uncertainty was not associated with perceived degree of formalization.

In the Nepalese sample, sixty percent (N=124) of the respondents indicated that they were low in tolerance for uncertainty (Group I) and thirty-seven precent (N=77) indicate that they were more tolerant of uncertainty (Group II). The mean formalization score of Group I

Table 5.19

Two Groups of Respondents' Perceptions of Formalization Measured in Relation to Their Tolerance for Uncertainty

	Alberta Sample	Nepalese Sample
	Formalization (Total Sample, Mean=3.33, N=260)	Formalization (Total Sample, Mean=5.12, N=207)
More Tolerance for Uncertainty (Mean=5.43)	Group II (N=133) Mean=3.33	Group II (N=77) Mean=4.63
Less Tolerance for Uncertainty (Mean=3.10)	Group I (N=122) Mean=3.34	Group I (N=124) Mean=5.43
	Level of Significance of Difference between the Groups=0.982	Level of Significance of Difference between the Groups=0.001

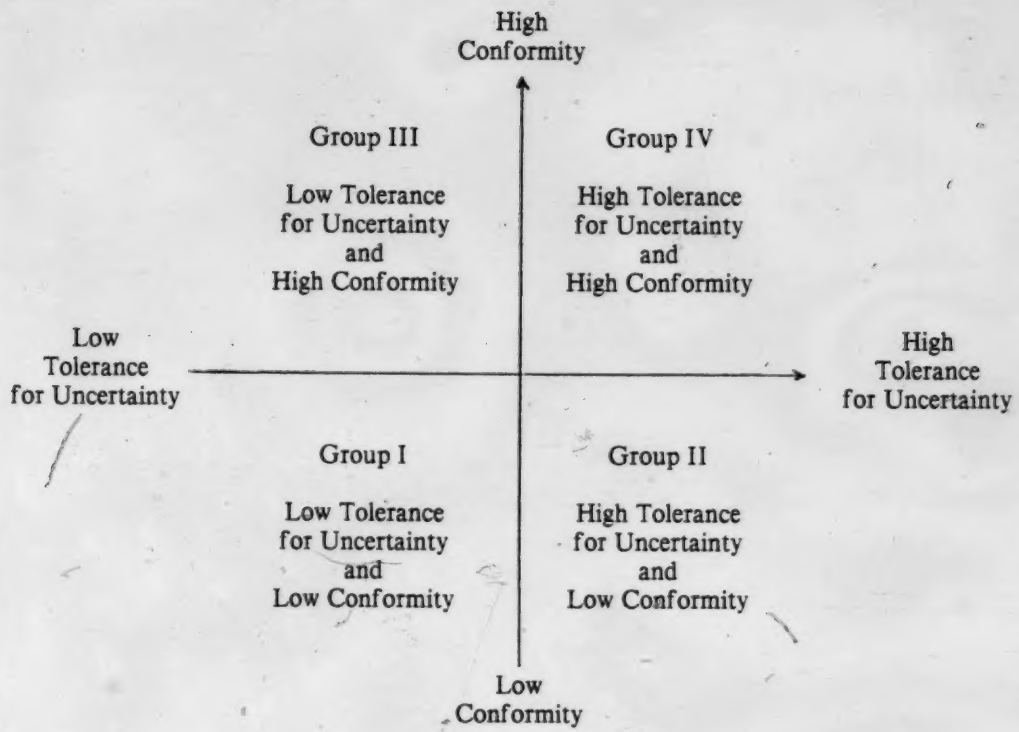
Note: The two groups of respondents are divided on the basis of their responses to tolerance for uncertainty.

(mean=5.43) was higher than Group II (mean=4.63). The result of the *t* test indicated that the two groups of the Nepalese respondents were significantly different at the 0.001 level. The findings show that the respondents' tolerance for uncertainty was inversely related to the degree of formalization perceived. As seen in Table 5.19, the mean scores of formalization of the two Nepalese groups were considerably higher (Group I mean=5.43 and Group II mean=4.63) compared with the Canadian groups (Group I mean=3.34 and Group II mean=3.33).

Exploration of Relationships Among Variables of Cultural Values and Structure by the Analysis of Responses of Four Groups

In the previous three analyses, the respondents were divided into two groups on the basis of their response to one variable of cultural values, and the responses of these two groups to a variable of structure were analysed. Each of the above three analyses, therefore, explored the relationship of one variable of culture with one variable of structure. Further attempts were made to investigate the relationship of a combination of two variables of cultural values with structural formalization. In other words, respondents were divided into different groups on the basis of their own responses to a set of two variables of cultural values and then the level of formalization perceived by each of the groups was analysed. The analysis of such group perceptions revealed the pattern of relationship of the variables of cultural values with formalization.

In the first analysis, the mean scores of conformity and tolerance for uncertainty were used to establish four groups of respondents. The following is a diagrammatic explanation of the four groups:



As is indicated above, Group I in both samples includes respondents who were less inclined to conform to the social and organizational standards and authority, and were less tolerant of uncertainty. Respondents in Group II had higher degree of tolerance for uncertainty and lower conformity. The respondents in Group III were less tolerant of uncertainty and were more inclined to conform to social and organizational standards and authority. Different from all others, Group IV in both samples had high tolerance for uncertainty and was inclined to conform to social and organizational standards and authority.

As Table 5.20 shows, Group II of the Alberta sample contained eighty respondents, which made this the largest group. Group I was the smallest with forty-eight respondents. In the Nepalese sample, the respondents were unevenly distributed among four groups. Group I contained fourteen percent (N=28) of the total respondents. On the other hand, approximately fourty-eight percent (N=96) were in Group III. This indicated that a large percent of the Nepalese respondents were low in tolerance for uncertainty and were more inclined to conform to social and organizational standards and authority.

Table 5.20

Four Groups of Respondents' Perceptions of Formalization
Measured in Relation to Their Conformity
and Tolerance for Uncertainty

Alberta Sample

Formalization
(Four Groups combined, Mean=3.33)

Measures of Conformity (Mean=3.37)	Measures of Tolerance for Uncertainty (Mean=5.43)	
	Below Mean	Above Mean
Above Mean	Group III (N=76) 3.44	Group IV (N=53) 3.50
Below Mean	Group I (N=48) 3.20	Group II (N=80) 3.22

Nepalese Sample

Formalization
(Four Groups combined, Mean=5.12)

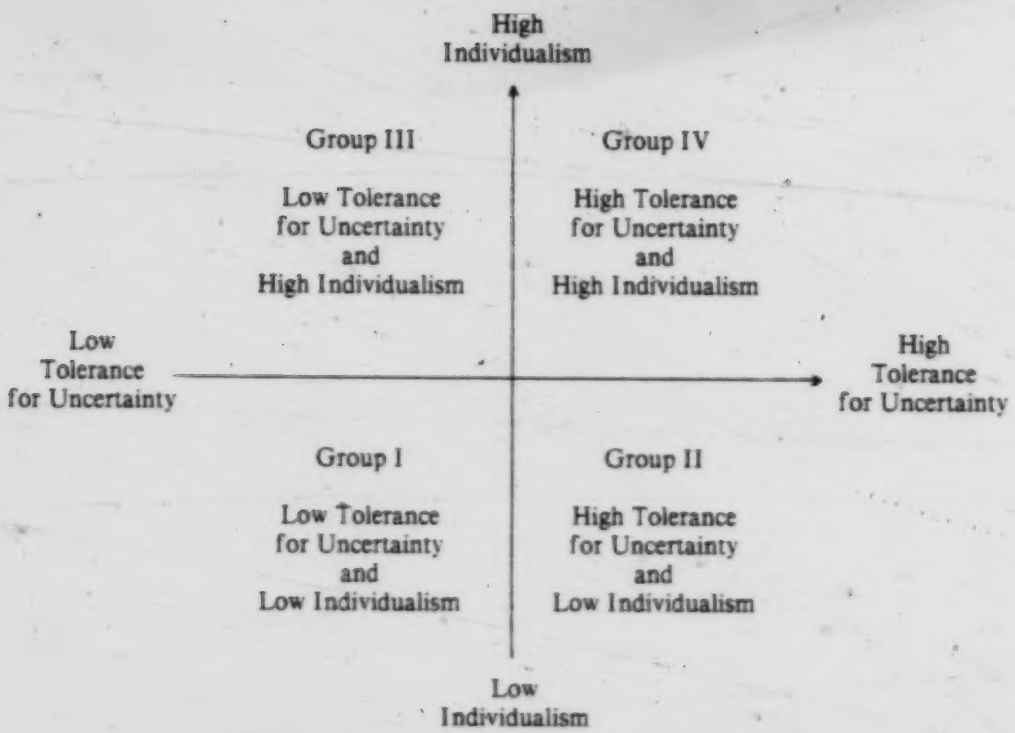
Measures of Conformity (Mean=5.40)	Measures of Tolerance for Uncertainty (Mean=3.10)	
	Below Mean	Above Mean
Above Mean	Group III (N=96) 5.53	Group IV (N=37) 4.51
Below Mean	Group I (N=28) 5.10	Group II (N=40) 4.74

Note: The groups of respondents are divided on the basis of their responses to conformity and tolerance for uncertainty.

The results of the analysis reported in Table 5.20 show that the Alberta respondents in Group IV, who were more tolerant of uncertainty and had more conformity, perceived their university as a more formalized (mean=3.50) organization compared with the other groups of their colleagues. The respondents in Group I, who had less tolerance for uncertainty and were less inclined to conformity perceived less formalization (mean=3.20) in their work place. In order to test the differences in the mean formalization scores of the four Groups of the Alberta sample, the Scheffé test was used. The results indicated that they were not significantly different from each other. It can be interpreted that the two variables of culture had no significant effect on the level of formalization perceived by each of the four groups.

The results of the Nepalese sample provided a somewhat different picture. Group III perceived the work environment as more formal (mean=5.53) than the other three groups. The respondents included in this group indicated less tolerance for uncertainty and more conformity for social and organizational standards and authority. The respondents in Group II perceived their university as a less formalized (mean=4.74) organization than did Group III. The Scheffé test revealed that the mean formalization scores of these two groups were significantly different at the 0.100 level. This indicated that the more the Nepalese respondents valued conformity and low tolerance for uncertainty, the more they perceived their university to be a formalized organization. Those with opposite values perceived the organization as less formalized.

A further attempt was made to investigate the relationship of another combination of two variables of cultural values (i.e., individualism and tolerance for uncertainty) with formalization by analysing the responses of the groups of respondents in the two different samples. The respondents were divided on the basis of their own responses to a set of two variables of cultural values -- individualism and tolerance for uncertainty. The mean scores of these two variables were used to establish four groups of respondents. The groups can be diagrammatically described as follows:



Group I in both samples was less individualistic and had less tolerance for uncertainty. Respondents in Group II had higher degree of tolerance for uncertainty and were less individualistic. The respondents in Group III were less tolerant of uncertainty and were more individualistic. Group IV, in both samples, had a high tolerance for uncertainty and was more individualistic. As Table 5.21 shows, there were sixty Alberta respondents in Group I and sixty-eight in Group IV. Group II and Group III contained sixty-two and sixty-five respondents respectively. In the four groups of the Nepalese sample, respondents were not evenly distributed. Approximately fifty percent (N=98) of the total respondents were in Group I. On the other hand, Group II composed of just nine percent (N=18) of the sample.

As seen in Table 5.21, the mean formalization scores of Group I, Group II, Group III and Group IV of the Alberta respondents were 3.32, 3.33, 3.34 and 3.33 respectively. The Scheffé test indicated that these mean scores were not significantly different. This revealed the variables of culture as not having a significant effect on or relationship with the level of formalization perceived by each of the groups.

Table 5.21

Four Groups of Respondents' Perceptions of Formalization Measured in Relation to Their Tolerance for Uncertainty and Individualism

Alberta Sample

Formalization (Four Groups combined, Mean=3.33)

Measures of Individualism (Mean=4.37)	Below Mean Uncertainty (Mean=5.43)	Above Mean Uncertainty (Mean=5.43)
Above Mean	Group III (N=62) 3.32	Group IV (N=68) 3.33
Below Mean	Group I (N=60) 3.34	Group II (N=65) 3.33

Nepalese Sample

Formalization (Four Groups combined, Mean=5.12)

Measures of Individualism (Mean=3.57)	Below Mean Uncertainty (Mean=3.10)	Above Mean Uncertainty (Mean=3.10)
Above Mean	Group III (N=26) 4.86	Group IV (N=56) 4.44
Below Mean	Group I (N=98) 5.60	Group II (N=18) 5.24

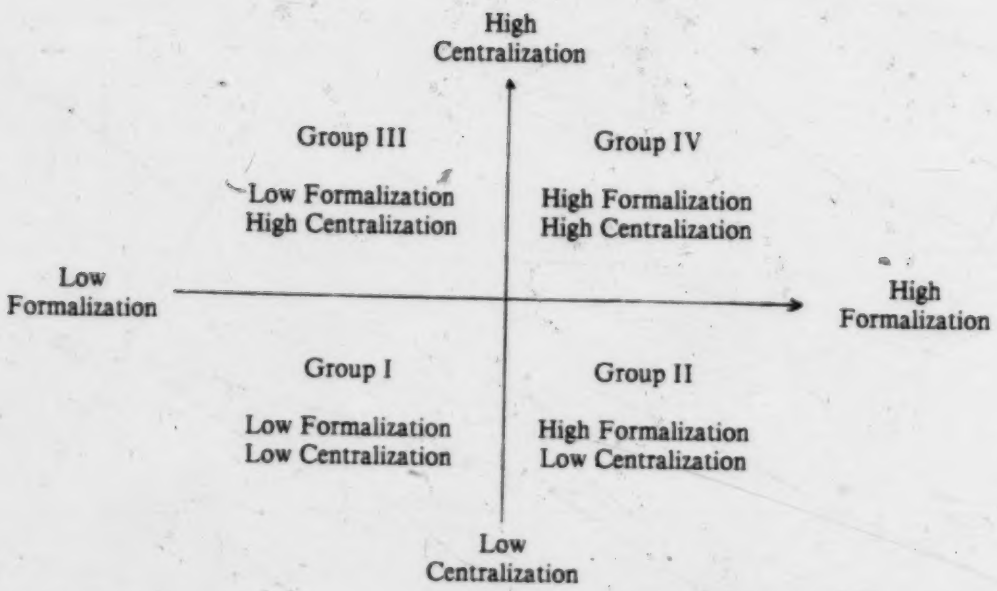
Note: The groups of respondents are divided on the basis of their responses to tolerance for uncertainty and individualism.

As the table indicates, Group I of the Nepalese sample perceived their work environment as more formal (mean=5.60) than did the other groups. This group, as indicated above, was less tolerant of uncertainty and less oriented toward individualism. The respondents in Group IV and Group I held different perceptions concerning the above two cultural variables. Respondents in Group IV perceived their university as a less formalized (mean=4.44) organization than did other three groups. The mean formalization scores of Group I and Group IV were significantly different at the 0.100 level. Based on this finding it can be interpreted that the more the Nepalese respondents were oriented toward individualism and the more tolerant they were of uncertainties, the less they tended to look at their university as a formalized organization. Since Group I was comprised of approximately fifty percent of the total respondents, one might say that the majority of the Nepalese professors had a tendency to be less oriented toward individualism and, at the same time, to be less tolerant of uncertainty. This distinct pattern of value orientation may have directly influenced their perception concerning the level of formalization of their organization.

Exploration of Relationships Among Variables of Structure and Satisfaction by the Analysis of Responses of Four Groups

In the previous two analyses, respondents were divided into four groups on the basis of their response to the two variables of cultural values and the perception of the structural formalization of the four groups of respondents were analysed. These analyses explored the relationship of the variables of culture with the variable of structure. In the following analyses attempts were made to investigate the relationship of the variables of structure (i.e., centralization and formalization) with (a) satisfaction with structure, and (b) overall job satisfaction.

In both analyses presented in this section, the mean score of centralization and formalization were used to establish four groups of respondents. The groups can be graphically explained as follows:



As indicated above, the respondents included in Group I perceived their university as a less formalized and less centralized organization. Respondents in Group II held a perception that their organizations were less centralized and comparatively more formalized. Different from the others, the respondents included in Group III perceived that their organization was more centralized and less formalized. The respondents of both samples, who were identified as Group IV, had perceived more centralization as well as more formalization in their work place.

Table 5.22 indicates that the respondents from Alberta were almost evenly distributed among the four groups. There were seventy-one respondents in Group I and fifty-nine in Group II. Groups III and IV were made up of sixty-three and sixty-six respondents respectively. In the Nepalese sample, the pattern of group distribution was different. Approximately sixty percent of the total respondents were in Group IV. On the other hand, Group II made up just a little over eleven percent.

In the Alberta sample Group IV was most highly satisfied (mean=5.34) with the structure compared with Group I (mean=5.21), Group II (mean=5.30), and Group III (mean=4.90). The results of the Scheffé test indicated that the mean satisfaction with structure score of Group III was significantly different from those of Group IV and Group II at the 0.10 level.

Table 5.22

Mean Satisfaction with Structure of Four Groups of Respondents Measured in Relation to Their Perceptions of Centralization and Formalization

Alberta Sample

Satisfaction with Structure (Four Groups combined, Mean=5.20)

Measures of Centralization (Mean=2.74)	Measures of Formalization (Mean=3.33)	
	Below Mean	Above Mean
Above Mean	Group III (N=63) 4.90	Group IV (N=66) 5.34
Below Mean	Group I (N=71) 5.21	Group II (N=59) 5.30

Nepalese Sample

Satisfaction with Structure (Four Groups combined, Mean=2.71)

Measures of Centralization (Mean=5.62)	Measures of Formalization (Mean=5.12)	
	Below Mean	Above Mean
Above Mean	Group III (N=28) 3.10	Group IV (N=122) 2.43
Below Mean	Group I (N=34) 3.04	Group II (N=23) 3.30

Note: The groups of respondents are divided on the basis of their responses to centralization and formalization.

On the other hand, the respondents of the Nepalese sample who were identified as Group IV were least satisfied with the structure of their organization (mean=2.43) when compared with Group I (mean=3.04), Group II (mean=3.30), and Group III (mean=3.10). Since the respondents in Group IV perceived their university as a more centralized and more formalized organization than did rest of their colleagues, their low satisfaction with structure might be interpreted as response to the high centralization and formalization they experienced in the work place. The mean satisfaction with structure score of Group II was highest among four groups of the Nepalese respondents. They perceived the structure of their organization as comparatively less centralized and more formalized. The size of Group II was very small (N=34) and the mean satisfaction score (3.30) of this group, although highest among the Nepalese groups, was closer to a response category of the questionnaire which signifies that they were somewhat dissatisfied.

It is important to note that the respondents of the Alberta sample who were identified as Group IV, were more satisfied than were others with the structure of their organization, in spite of the greater centralization and formalization they perceived in their work place compared with the rest of their colleagues. Moreover, the findings presented in Table 5.22 indicate that the mean satisfaction with structure score of Group II and Group IV of the Alberta sample was higher than the mean score of the remaining two groups. The respondents included in Groups II and IV, who were comparatively more satisfied, perceived their organization as more formalized than others. On the other hand, the respondents in Group I and Group III of the Alberta sample, who perceived that their organization was less formalized, were less satisfied with structure. According to the findings, for a large group of Alberta respondents the extent of the formalization that they perceived seemed to contribute to the degree of satisfaction they experienced. To provide further support to this interpretation, it was necessary to find to what extent the satisfaction with structure of Group I and Group III differed from the two other groups, who preceived their organization as comparatively more formalized. The Scheffé test indicated that the mean satisfaction with structure of Group III

was significantly different from Group II and Group IV at the 0.100 level. However, Group I was not significantly different from Group II and Group IV.

Further analyses were conducted to explore the relationship of the two variables of organizational structure (i.e. centralization and formalization) with overall job satisfaction. As Table 5.23 indicates, Group IV of the Nepalese respondents were least satisfied (mean=2.63) with the overall condition of their job compared with other groups. The mean job satisfaction scores of Groups I, II, and III were 3.23, 4.00, and 3.62 respectively. Group IV of the Nepalese sample, which was least satisfied with the job, perceived the university as a highly centralized and more formalized organization. Based on the above observation one can assume that if a feeling that the work environment was more centralized and more formalized could lead a group of the Nepalese respondents toward job dissatisfaction, another group, which perceived the work organization comparatively less centralized and less formalized consequently should be satisfied with the job. The mean job satisfaction score (mean=3.23) of respondents in Group I, who perceived their organization as less centralized and less formalized, was higher than the mean score (mean=2.63) of Group IV. This supported the above assumption; because the job satisfaction of Group I was higher than Group IV, who perceived a high degree of centralization and formalization. Moreover, the Scheffé test indicated that the mean job satisfaction scores of Groups I and IV were significantly different at the 0.10 level. A further comparison of Group I with Group II and III, however, revealed an inconsistency. The respondents in Group I were less satisfied than the respondents in Group II (mean=4.00) and Group III (mean=3.62), who saw their organization more formalized and more centralized respectively. However, the job satisfaction of these three groups was not significantly different at the 0.10 level.

In summary, the findings of the two successive analyses discussed above indicated a number of dissimilar features. In the first analysis, greater formalization was identified as the possible source of satisfaction with structure for the Alberta respondents. This inference was based on the greater satisfaction experienced by Group II and Group IV than by the other two

Table 5.23

Mean Job Satisfaction of Four Groups of Respondents Measured in Relation to Their Perceptions of Centralization and Formalization

Alberta Sample

Job Satisfaction (Four Groups combined, Mean=5.74)

Measures of Centralization (Mean=2.74)	Below Mean	Above Mean
Above Mean	Group III (N=63) 5.60	Group IV (N=66) 5.71
Below Mean	Group I (N=71) 5.80	Group II (N=59) 5.92

Measures of Formalization (Mean=3.33)

Nepalese Sample

Job Satisfaction (Four Groups combined, Mean=3.01)

Measures of Centralization (Mean=5.62)	Below Mean	Above Mean
Above Mean	Group III (N=27) 3.62	Group IV (N=122) 2.63
Below Mean	Group I (N=34) 3.23	Group II (N=23) 4.00

Measures of Formalization (Mean=5.12)

Note: The groups of respondents are divided on the basis of their responses to centralization and formalization.

groups of the Alberta respondents. In the second analysis the mean job satisfaction score of Group II was higher than that of other three groups. As Table 5.23 indicates, the mean job satisfaction score of Group IV (Alberta sample) was less than Group I which perceived the work organization less formalized. Therefore, for the Alberta respondents the higher degree of formalization was not necessarily a factor in greater job satisfaction.

D. SUMMARY

The results of the data analyses presented in this chapter revealed the differences that existed between the Alberta and the Nepalese samples. The differences across the samples were analysed in terms of the structural centralization and formalization of the two university organizations, members' satisfaction with structure, overall job satisfaction and their value orientations. Three dimensions of values -- conformity, individualism and tolerance for uncertainty -- were analysed.

The results of the analyses indicated that the organizational structure of Tribhuvan University in Nepal was perceived to be more centralized and more formalized than that of the University of Alberta. Considerable differences were observed in members' satisfaction and value orientations. The findings indicated that the respondents from TU were less satisfied with the way their university was structured, and experienced less satisfaction with the overall conditions of the job. The respondents from Alberta were comparatively more satisfied with their job and with the structure of their organization. In addition, they indicated less conformity to social and organizational standards and authority, and were more individualistic and more tolerant of uncertainty compared to their Nepalese counterparts.

A further analysis reported in this chapter investigated the differences between faculties at TU and the U of A. The purpose of the analysis was to compare the pattern of differences between the two universities with the pattern of differences between the faculties of each university. The results indicated that apart from a few exceptions, the members of different

faculties at the two universities were not significantly different in terms of their perception of structural centralization and formalization, their satisfaction and value orientation.

A different set of findings indicated that there were few similarities and a number of dissimilarities in the relationship of variables across the two samples. In both samples, respondents' satisfaction with structure was positively correlated with their job satisfaction. Respondents' tolerance for uncertainty in both samples was negatively related to conformity. Apart from these similarities, other variables demonstrated their relationships differently across the samples.

Chapter VI

DISCUSSION OF THE FINDINGS

The intention in this chapter is to highlight the themes that emerged from the findings of the study and to examine the theoretical implications of these themes. In addition, the analysis presented in the chapter addresses the following research question: To what extent do the results of the study support either the culture-free or culture-specific models of cross-cultural research? The chapter is organized into three major sections. First, the findings of the study are discussed. These focus on the cultural and organizational differences between the two samples. Differences are examined in terms of the variables of organizational structure, members' satisfaction and value orientations. The cross-sample similarities and differences in the relationship of these variables are then analysed in relation to relevant concepts in the literature. In the second section of this chapter, an attempt is made to identify the theoretical implications of the findings of this study. Finally, some selected issues related to the methodology of the comparative research are disscused.

A. THEMES EMERGING FROM THE FINDINGS

As has been noted above, the discussion of the findings focuses (a) on the observed differences between the two university organizations located in two cultural settings, and (b) on the relationship among the variables which were operationalized to measure the cross-sample differences and similarities.

Differences in Structure, Satisfaction and Values

The findings of this study indicated that the two universities were different in terms of their perceived structural centralization and formalization. As the data indicated, the Nepalese

university (TU) was comparatively more centralized while the University of Alberta (U of A), on the other hand, was less centralized and less formalized.

Differences in Organizational Characteristics

In Tribhuvan University, the units, committees and councils, which function at the faculty and university-wide levels, exerted the greatest influence over most decisions analysed in the study. As is obvious, the faculties and the units functioning at the university-wide levels are the highest administrative levels in the university. Their ability to exercise greatest authority in the process of decision making is an indication of the fact that a limited authority was bestowed upon the units and committees at the department level. In this study, the individual professor and the department were identified as the two lowest levels of the academic administration in the universty.

An administrative structure of a different nature was found in the University of Alberta. Contrary to the situation observed at TU, the units and committees at the department level at the U of A were most influential over instructional decisions. The process of making such decisions was less affected by those authorities working at the university-wide levels. The units and committees at the department level excercised considerable authority on decisions related to the operations of their department. Moreover, they had some influence even on selection and promotion decisions. The members of departmental units and committees of Tribhuvan University exerted negligible influence on the decisions that affected promotion, and selection of new colleagues.

Some additional factors emerged from the interpretation of the findings. Results support the assumption that a department at the U of A functioned in a manner which Clark (1983) described as a collective body of peers which is allowed to exercise collegial authority in the making of some important decisions. The respondents from Alberta indicated that a professor as an individual and as a member of the department, had greatest authority when

deciding on content which was to be included in courses taught and what text and reference materials to use. In addition, the pattern of authority distribution found at the U of A can be linked with the general trend of academic administration evident in most North American universities developed from the British tradition. Clark (1983:112) stated that the practice of professorial control has been widespread in the academic world from the twelfth century to the present. It has had exceedingly strong ideological support in the doctrines of freedom of teaching and research. It is also congenial to the expression of expert judgement; the growth of specialization in recent decades has increased the influence of professorial control in the form of peer decision making.

As Clark (1983:128) and Perkins (1973:18) contended, the tradition of professorial authority flourished in Oxford and Cambridge and was adopted by North American universities. The practice in continental Europe is to place the organizations of higher learning under a governmental bureaucracy and academics within the civil service. Consequently, the "continental systems" were bound to be more bureaucratic and centralized. Clark (1983:128) indicated:

> . . . in vertical profile, the British mode has placed strong authority at the bottom, in guild forms, but has emphasized the collegial over the personal approach more so than the Continental systems.

When the decentralized structure of the University of Alberta is placed within the context of the historical development of university systems in Anglo-Saxon culture, it becomes evident that the organizational structure of the U of A is not an isolated case; rather, it is a part of a general system which evolved within a particular context.

Several studies provide evidence of a trend toward decentralization of authority in North American universities in the two decades begnning 1960. Gross and Grambsch (1974) conducted two successive surveys (in 1964 and 1971) of 68 universities to explore changes in power and authority structure. They (1974:129-135) found that there was a general belief among the respondents that more authority over the process of decision making had become available to a wider spectrum of participants in universities. Compared to the situation in 1964,

a greater number of participants in 1971 was able to influence the decisions that affected their work. The members of the faculties were among those whose authority was believed to have increased most significantly.

Cohen and March (1974) pointed out that American college presidents, and the units and committees which functioned on their behalf, usually had modest control of events. In their observation, the authority structure in American colleges and universities had gradually been diffused, and participation in decision making had become fluid. They did, however, acknowledge that the central administration (i.e., president's office) still exerted the utmost authority over the major decisions, especially through control of the budget-related decisions and broader policy matters. However, the decisions that affected the everyday operations at the department level were mostly made by the members of the department.

To a large extent, the results of this study were consistent with the findings of the studies of Cohen and March (1974), and Gross and Grambsch (1974). Professors at the University of Alberta, either individually or as a member of committees functioning in various departments, exerted considerable influence over a significant number of decisions. Individually they made decisions as to what reference material should be used and what content should be included in courses they taught. As the members of a department, they participated in several decisions, for example, those related to student admission. The professors of the U of A, however, had limited say over decisions concerning academic policy matters. In other words, the decision with regard to the approval of a new academic program in a department was centralized. This particular finding is consistent with the observation made by Cohen and March (1974). They alluded that, in North American universities, it is the high level administration that makes final decisions concerning such policy matters. Based on these findings, a conclusion could be reached that the existing structure of the U of A is just another example of a structural pattern visible in most North American universities.

Unavailability of relevant literature makes it difficult to analyse the structure of Tribhuvan University in the context of the institutional development of the particular region.

Yet, on the basis of the findings of this study, it is evident that meaningful differences existed in the levels of structural centralization of the two universities located in markedly different settings. The findings clearly indicated that the University of Alberta was less formalized than Tribhuvan University. The administrative system of TU relied on clearly specified performance standards to evaluate professors' work. Moreover, a high degree of reliance on administrative rules and periodic supervision, which were meant to coordinate and to control the activities of professors, were the inherent characteristics of the management practices prevalent at TU. Professors at the U of A, on the other hand, perceived that their work was comparatively less supervised by higher authorities and was less governed by rules and prescribed standards.

As has been discussed earlier, if the administrative system of the U of A is indeed a product of the principles of collegial control and professorial freedom prevalent in so called Anglo-Saxon institutions of higher learning and research, most of the existing rules that coordinate activities at the operational level (i.e., department) can appropriately be described as collegial rule. Clark (1983:113) asserted:

> collegial rule is the professors' strongly preferred way to run a department as a whole and other such larger accessible units as the faculty . . . . In normal form, it is expressed in several-hour meetings.

The rules formulated by such discussion can be described as self-rule. As Clark (1983:112) noted, self-rule at the operating level of a North American university is likely to be quite strong. Professors at the University of Alberta indicated that their work was less governed by prescribed rules. This is certainly not an indication of the nonexistence of rules at the U of A; it is difficult to imagine a system running without rules. But members' attitude toward a rule which is perceived as a rule formulated by their own participation, may differ greatly from the rules which they perceived as prescribed by the authorities. When professors at the U of A maintained that the prescribed rules did not govern their activities, they did not mean that their activities were also not guided by non-prescribed rules.

Another set of findings revealed that the professors of the two universities experienced different levels of satisfaction. Professors at the University of Alberta were highly satisfied

with the structure of their organization. The Nepalese professors, however, were less satisfied with the way their university was centralized and formalized. In addition, the professors of the two universities differed significantly in terms of their overall job satisfaction.

Differences in Cultural Orientations

Differences also appeared in cultural orientations. The Nepalese professors were more inclined to conform to social and organizational standards and authority than were their Alberta counterparts. In addition, the professors at TU were less individualistic and had less tolerance for uncertainty while the professors at the U of A were more individualistic and more tolerant of uncertainty.

A number of comparative studies in the field of management revealed differences of similar nature. They provided glimpses of value systems prevalent in particular societies. Meade (1967) found Indian systems more authoritarian compared with systems in other countries. Maier and Hoffman (1962) concluded that the American leadership style was less authoritarian. Hofstede (1980b) found North American employees tended towards less uncertainty avoidance than those from India. Since these studies referred to the contexts found in North America and India, they may appear irrelevant for a study which compared the value orientation of individuals from Canada and Nepal. And yet, it is difficult to refute the argument that Canada and Nepal basically are part of two major cultures that have evolved in North America and in the Indian sub-continent, respectively.

As Smircich (1983:342) pointed out, the structural functionalists in the field of cultural anthropology described culture as an adaptive regulatory machanism which unites individuals in social systems. Within the perspectives of the ideational, culture is defined as a system of cognitions and shared symbols. As a cognitive anthropologist Goodenough (1981) alluded that the human mind generates culture by means of social rules. Goodenough (1957:167) wrote:

> A society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its members. Culture is not a material phenomenon

> . . . . It is the form of things that people have in mind, their models for perceiving, relating, and otherwise interpreting them.

Goodenough described culture as knowledge and experience of human mind. Another approach to defining culture, which is related to but distinct from Goodenough, has been to describe culture as system of shared symbols and meanings. Geertz (1973) suggested that while exploring the meanings and symbols shared by individuals one should not become entangled with the investigation of the staggering richness and complexity of the human mind, that is, human knowledge and experience. To study culture is to study codes of meaning shared by a group. To explain the concept of shared meanings and symbols, Keesing (1974:79) wrote that "symbols and meanings are shared by social-actors -- between, not in them; they are public, not private."

Two fundamental themes emerge from these definitions of culture:

1. culture is an intangible regulatory mechanism which unites individuals in social systems; and,
2. the end product of such a mechanism surfaces as meanings and symbols shared by the social actors.

When these themes are defined in a different fashion, they reflect the continuing process of socialization taking place in every society which moulds the outlook of individuals into a common pattern. With these ideas emerges the concept of organizational culture. Riley (1983:435) asserted:

> In the context of everyday organizational experience, individuals draw on largely unconscious patterns that form the formal and informal rules and procedures, the language they use to communicate, and even their knowledge and personalities. By using these structures again and again, these individuals relegitimate what was past, provided a medium for the present, and set the stage for the future -- this is the cultural mechanism.

Such mechanism, which functions in every organization, produces distinct organizational culture. Riley (1983:435) again noted:

> What is most intriguing about organizational culture is the influence it has on the lives of those who live and work within its confines. This power extends to their perceptions, their desires, their goals, and their actions.

This structurationist explanation of the development of organizational culture gave rise to an important concept, namely, that through the process of cultural conditioning and programming a shared international culture evolves in organizations of similar nature across different social contexts.

The above concept leads to the position that university organizations, irrespective of their geographical location and cultural environments, may evolve similar organizational cultures. In relation to this study the culture can be described as university culture, and the values shared by the members of all universities (regardless of cultures in which they developed) should be similar. The findings of this study did not support this hypothesis. The members of the University of Alberta had a different value orientation from those of the members of Tribhuvan University. Contrary to the findings of this study, Everett et al. (1982:159) found that the American, British, Japanese and Singaporian members of multinational corporations shared a distinct managerial culture. There are very few studies which support the concept of international managerial culture. Further empirical evidence is required to understand the concept.

Relationships Among Variables

As has been mentioned in previous chapters, this study analysed centralization and formalization as the variables of organizational structure, respondents' satisfaction with structure and their overall job satisfaction were analysed as the behavioral variables, and finally, conformity, individualism and tolerance for uncertainty were analysed as the variables of cultural values. The investigation of the relationship among these variables was one of the major objectives of this study.

As the findings indicated, in both samples centralization of decision making authority was positively correlated with formalization. However, the size of correlations reflected a certain degree of difference in two samples. In the Alberta sample, the relationship was insignificant, which should be interpreted as non-existence of relationship. The level of

centralization in the Nepalese university (TU) had a weak relationship with formalization.

The literature reveals that several studies investigated the relationship between centralization and formalization. Pugh et al. (1968), Hinings and Lee (1976), and Donaldson et al. (1975) found no significant relationship between centralization and formalization. On the other hand, Child (1972) and Mansfield (1973) reported a strong negative correlation between the two variables of organizational structure. All these studies with contradictory findings were conducted within one national (i.e., United Kingdom) setting and applied the institutional method -- a method which relies on official documents and institutional spokesmen to acquire the data.

Studies conducted in North America used two distinct approaches to acquire information and yielded different results. Blau and Schoenherr (1971) operationalized the method used by most British studies, namely, the institutional method of data collection. Their findings, which were similar to those of the Child (1972) and Mansfield (1973) studies, demonstrated a negative relationship between centralization and formalization. On the other hand, Hall (1963) and Hage and Aiken (1967) found positive relationship between the two variables of structure. These studies used a different method of inquiry known as the perceptual appproach.

From the analysis and comparison of the findings of this study with those of other studies stem two noteworthy conclusions:

a. centralization is related to formalization differently across samples drawn from different settings; and,

b. even in a similar setting contradictory results were found by different studies. The possibility of such contradictions increases if different methods were used.

Contradictory findings of relevant studies have direct implications for the interpretation of results. An analysis of the findings of this study, without any reference to those of others, suggest that cross-sample differences in the relationship of two variables of structure are an example of influences exerted by the respective cultures. When the findings of various British

studies are considered, they suggest a different picture of reality. Pugh et al.(1968) and Child (1972) used a similar method within a similar cultural context (British) yet each arrived at a different conclusion with respect to the relationship between centralization and formalization. One may question why in these two British studies the subjects, who were influenced by the same English culture, responded differently and what would be a culturalist explanation of such differences. At the same time, such results may be seen as challenging the notion of stable relationship between the variables. The above mentioned studies reveal that there is no stable relationship between variables even in one national setting.

In this study a further attempt was made to explore the relationship between the variables of structure and members' satisfaction. In both the Alberta and the Nepalese samples, centralization was negatively associated with the respondents' satisfaction with structure and their overall job satisfaction. The size of the correlation, however, revealed a weak relationship among these variables. A certain degree of consistency was found when these findings were compared with findings of other studies.

Demerath et al. (1967) analysed the structural changes of the University of North Carolina which occurred during 1950s and early 1960s. A subsequent attempt was made to measure the effect of the change on faculty members' job satisfaction. They found that less participation or representation in the decision making process caused greater dissatisfaction. A changed administrative system allowed more participation in the decision making which increased faculty satisfaction significantly. Similar findings were reported by Miskel et al. (1979), Frank (1982), and DeTornyay (1981). These studies analysed schools and post-secondary organizations. Miskel et al. (1979) found a positive relationship between school structure and teacher satisfaction. It is important to note that these studies yielded similar findings in spite of the different research methods employed. Demerath et al. (1967) used a case study approach, whereas Miskel et al (1979) applied quantitative techniques to measure the relationship between the variables. Based on the consistency of findings it can be concluded that a negative correlation between centralization of authority and members' satisfaction is the

most probable approximation of empirical reality in educational organizations.

The analysis of the data gathered in Nepal and Alberta demonstrated two different results with regard to the relationship between formalization and satisfaction. The Alberta data indicated that formalization of university administration had a weak positive correlation with job satisfaction and satisfaction with structure experienced by the professors. To some extent, this finding was consistent with some other North American studies conducted within the educational settings. Miskel et al. (1979) reported a positive correlation between formalization of school organization and teacher satisfaction. In her analysis of nursing programs, Frank (1982) found a positive relationship between formalization and job satisfaction. These findings seem to suggest that professionals of North America (including the professors at the U of A) do not view formalization of their organization negatively. In other words, in varying degrees, they can cope with the formal structure of the organization.

The analysis of the Nepalese data produced somewhat different results. In the Nepalese sample, formalization was negatively correlated with professors' job satisfaction and their satisfaction with structure. However, the relationship was very weak and the values of correlation explained negligible variance.

The findings of the study reveal that the relationship between the variables of cultural values and the variables of organizational structure and satisfaction were mostly different in the two samples. In the Nepalese sample, conformity was positively correlated with structural centralization. The value of correlation, however, indicated that the relationship was weak. In the Alberta sample, conformity had no relationship with centralization. Similarly, cross sample differences existed in the relationship between (a) individualism and centralization, and (b) individualism and formalization. In the Nepalese sample, individualism was positively correlated with centralization and formalization. But in the Alberta sample individualism had no relationship with these two variables of structure. Individualism demonstrated a similar pattern in its relationship with job satisfaction and in satisfaction with structure. In the Nepalese sample, these variables among themselves had a positive relationships. In the Alberta

sample, individualism again had no relationship with either variable of satisfaction. In the Nepalese sample, tolerance for uncertainty was negatively correlated with centralization and formalization but was positively correlated with job satisfaction and satisfaction with structure. In the Alberta sample, tolerance for uncertainty was not related to these variables of structure and satisfaction.

Despite these differences in the relationship among variables, some variables demonstrated similar relationship across the samples. In both samples, positive correlations were found between (a) conformity and formalization, and (b) tolerance for uncertainty and satisfaction with structure.

B. THEORETICAL IMPLICATIONS OF RESULTS

The intention in this section is to explore whether there is empirical support in the results of this study for either the culture-free or culture-specific perspective in comparative research. This, indeed, is the central theoretical question for studies of organizations in cross-cultural contexts.

As has been described in Chapter II, in organizational management research the culture-free perspective stands upon the Weberian concept of rational bureaucracy. The argument is that organizations are constructed in a rational way. The functions of organizations are not influenced significantly by cultural and societal forces, which have a tendency to activate emergent or "irrational" forms. Therefore, the rational construct of organizations is unaffected by cultural forces. Within its rational formulation, an organization leaves no room for the permeation of irrationality from within or outside. Therefore, organizations, regardless of cultural and social environments that surround them, are fundamentally similar and function within a universal pattern. Implicit in this argument is the prospect of developing a general theory of organizations posing the existence of a rationality above cultural specifics. The argument is that such theories which are abstracted above and beyond cultural particularities of a nation and region can be applied universally. As Doorn (1979:61) noted, within the

culture-free perspective, organizations are viewed as an invention of the modern world (civilization) which is based on the logic of rationality and instrumentality.

A theory which emphasizes the logic of rationality consequently delimits its scope to the analysis of internal characteristics of organizations. Such a perspective is prone to criticism of those who view organizations as open systems. The more the external environment is considered as the important factor in the study of organizations, the importance of rationality as a guiding concept for organizational analysis is bound to diminish. This leads to an argument that perspectives delimited within the analysis of internal mechanisms of organizations is incomplete because the external (i. e., cultural, political, economical, social and environmental) forces which, in different ways, shape the structure, behavior, and goals of organizations are completely ignored.

Sorge (1983), one of the leading spokespersons of the culturalist perspective of organizations analysis, viewed organizations not as a product of rational human action but as a product of "cultured human action." Child and Tayeb (1983:48) synthesized the idea advanced by Sorge:

> [Sorge considered action] to be "cultured" in the sense that actors (organizational decision makers) interpret its premises in terms that are inherent in their culture. These "cultured actors" provide a point of synthesis between the ideational expression of a culture through shared assumptions, perspectives and values and its manifestation in the institutional development of structures and systems.

Individuals as cultured actors of a society have unique preferences tuned by the specific culture. Organizations within the society adopt administrative practices that are consistent with such preferences. In other word, culture is reflected in the choices that have been made among alternative solutions to cope with problems arising from the interaction between organization and the external forces.

Since the culturalists accept the proposition that specific cultures play a vital role in the development of unique administrative practices in organizations, they argue that such unique practices cannot be analysed by the application of a generalized, thus universal, theory.

A number of researchers (e.g., Adler:1983c, Child:1981) reviewed the literature and concluded that the studies directed at discerning universality (i.e., convergence) in characteristics of organizations in different cultures focused on macro-level issues such as structure and technology. The studies carried out within the culturalistic perspective focused on micro-level issues such as behavior of individuals working in organizations. In her article **Cross-Cultural Management: Issues to be Faced**, Adler (1983c:8) summarized the contemporary research with special reference to Child's work and wrote:

> . . . Organizations in different countries around the world are becoming more and more alike, but that the behavior of people within those organizations is maintaining its cultural specificity. For instance, whereas the technology used by organizations in Canada and Germany is becoming more similar, the way Canadians and Germans behave within those organizations is different, and that difference is being maintained.

This study intended to explore similarities as well as dissimilarities between organizations in different cultures. The purpose was to draw conclusions which can be used as evidence for the support of either of the two theoretical arguments or positions in comparative research. As Adler implied, a study with such an objective should operationalize macro-level as well as micro-level variables as the basis of analysis. This study seems to fulfill such requirements. Its findings are based on the analyses of macro-level (i.e., organizational structure) as well as micro-level (i.e., members' behavior and values) variables.

Theoretical Interpretation of Organizational Differences

The results of this study clearly indicated that the structure of the two universities located in two cultural settings were different. The structure of the University of Alberta was less centralized and less formalized. On the other hand, Tribhuban University was comparatively more centralized and more formalized. This study also revealed a significant difference in the satisfaction of these two groups of professors who had different cultural backgrounds. The professors at the U of A were largely satisfied with the overall conditions of their job and with the way their university organization was structured. On the other hand, their Nepalese counterparts were dissatisfied not only with their job but also with the structural

arrangements of their organization. Moreover, these two groups of individuals held distinct value orientations. The professors from Alberta were more individualistic, more tolerant of uncertainty and had a tendency not to conform to established social and organizational standards and authority. The Nepalese professors, on the other hand, were less individualistic, less tolerant of uncertainty and demonstrated more conformity.

The analysis indicated that all these differences were significant. As England and Harpaz (1983:49) stated, when the observed national differences are large in both an absolute and a relative sense, it is worthwhile to pursue the very difficult issues surrounding the reasons (cultural and social) why such differences exist in order to find a conceptual explanation for them. Since the results of this study revealed significant differences in the organizational structure of two universities, they seem to refute the general assumption that organizations across cultures are becoming more and more alike. However, such conclusion requires a certain degree of caution. It needs to be noted that the notion of convergence, as it is described by contingency writers, is conceptually associated with the "common industrial logic"(Kerr et al.:1960, and Harbison and Mayers:1959). The one (i.e., the notion of convergence or generalizability) cannot be described without reference to the other (i.e., common industrial logic). The theme that emerges from these two concepts is that the industrialization, in successive stages, brings about certain changes in the mechanism of organizations. These changes are seen as necessitating certain developments in organizational functioning and/or structuring. In this context it is interesting to note that some contingency writers use the concept of technology as a synonym for the notion of industrialization -- simply put, the more the society is industrialized, the more it is exposed to advanced technology. Technology is an indispensible part of industrialization.

In view of these arguments, the University of Alberta and Tribhuvan University are bound to have different structures due to the different levels of industrialization attained by the societies where the universities are located and due to different kinds of technologies used within respective systems (organizations). According to this line of theorizing, there would be

no differences in structure if the level of industrialization and the technologies used in organizations were similar. In other words, if the Nepalese society was as industrialized as Canada is there would be no difference in the structure of the universities. At this stage, the validity of this argument cannot be examined, therefore, it is really difficult either to dismiss or to support it. However, the argument leads to the question as to how applicable the concepts of technology or the logic of industrialization are in the study of university organizations. There exists a notion that the structure of universities and the behavior of academics are less determined by factors such as the level of industrialization and new technologies. To find out the merits of this argument further research is required.

The researchers who support the concept of universality argue that the contextual variables, such as technology, size, and interdependence, are the most important factors which need to be considered while analysing the similarity and differences between organizations. They are important in the sense that size of the organization, and the type of technology used within the organization, exert profound influences on several other aspects of the organization, such as structure, effectiveness, and satisfaction. As Blauner (1964) and Woodward (1965) claimed, technological advancement leads to a qualitative transformation of behavior and attitudes at work. Such transformations change the structure of organizations. Child and Tayeb (1983:28) noted that in every national settings the adoption of a given technology will have the same influencial consequences for the design of a viable organization structure.

Based on this argument the observed difference in the structure of the Nepalese and the Canadian universities can be described as the effect of different contingencies they face. Therefore, the difference was not necessarily created by specific cultural forces. Rather it was created by the different contingencies faced by the two university organizations. Such difference is expected and can be explained within the culture-free and/or contingency perspective(s). This does not refute the premises of the theory.

Priority for the Investigation of Relationships Among Variables

The researchers who intend to develop universally applicable theories, argue that differences between organizations across cultures are purely incidental. A university in Nepal with its distinct organizational background and context is bound to be different from a university in Canada. Hickson et al. (1979:30-31) contended:

> in cross-societal research differences between countries (in levels of scores) may arouse curiosity, fundamentally it is the relationships between variables that is first priority for study.

This means that the organizational differences found by a study cannot be produced as complete empirical evidence either to support or to reject a concept. Differences are the scores on a scale. By using a particular scale of measurement, one may find a number of organizations in various national settings more centralized and more formalized than others. In spite of such differences, if centralization correlates positively with formalization in the samples drawn from all national settings, the researcher may dismiss the observed differences as incidental and may claim that the positive relationship between centralization and formalization is a universal organizational reality. Such finding may be regarded as support for the argument that cultural particularities of various societies have negligible effect on the relationship of the two variables of organizational structure.

Scholars who advance the culture-free thesis hold a notion that if organizations located in various cultures face similar contingencies (i.e., technology, size, interdependence, and market) the relationship between organizational variables would be similar in every culture. They argue that since the fundamental construct of organizations are similar, they can be analysed by utilizing a universally applicable model. Hickson et al. (1979:29) asserted:

> there is a critical difference between the position if organizations differ with culture or nationality (i.e., levels of scores on variables differ) or if relationships between variables differ with culture or nationality. The one is interesting, the other terrifying.

This would be terrifying in the sense that an absence of similarity in the relationship of organizational variables would indicate that organizations differ with culture and nationality. If this is so, then, organizations that are fundamentally different cannot be analysed within one

theoretical framework. This may necessitate the proliferation of a whole array of culture-bound theories, applicable in one culture but useless in another.

In this study some variables were related similarly in both settings. For example, in both the Alberta and Nepalese samples, formalization was positively correlated with centralization. Similarly, centralization was negatively related with job satisfaction and satisfaction with structure. In both samples, conformity demonstrated a positive association with centralization, formalization, satisfaction with structure and job satisfaction. All these correlations, however, were weak and explained the variance in the order of 5 or 6 percent.

There were some statistically significant correlations that supported the notion of stable relationship across cultures. In both samples, respondents' overall job satisfaction was positively correlated with their satisfaction with structure. Similarly, in both samples, respondents' tolerance for uncertainty was negatively related to their conformity to social and organizational standards and authority. Apart from these cross-sample similarities in relationships a number of variables were related differently in the two samples. The findings evidenced the inconsistency in the pattern of relationships among variables across samples. Some variables demonstrated a similar relationship in both samples while others did not. If obliged to make comparison between similar and dissimilar relationships, dissimilarities in relationship seem to outweigh the similarities. The similarities in the relationship of variables in two samples support the notion of stable relationship of culture-free perspective, observed differences seem to challenge the notion.

The finding do not support the notion of similar relationship of variables across samples. However, from the contingency perspective the argument again can be made that the cross sample differences in the relationship of variables reported by this study do not refute the notion of stable relationship. The universities compared in this study faced different contingencies (e.g., technology). Therefore, the differences in the relationship of variables could be an outcome of such differing contingencies. From the culture-free perspective, convergence or divergence in organizational characteristics cannot be diagnosed unless the

contextual variables of organizations are controlled. In other words, organizations that are compared should be of similar size, should have adopted a similar technology, should have similar market, and similar interdependence with other organizations and the like. Child and Tayeb (1983:59) contended:

> Matching and control are central to cross-national research designed following the nomothetic strategy. This strategy is concerned with the search for general statement of relationship [among variables].

It seems that to offer evidence of differences in organizational characteristics which is acceptable for contingency and/or culture-free writers, several aspects of organizations have to be matched and controlled. By emphasizing the prescriptions of match and control, the organizations selected for comparison would be very much identical. A concern then emerges: what significant difference could be expected from comparing organizations with built-in similarities ?

The above discussion suggests that the organizational differences found in this study do not necessarily challenge some fundamental premises of culture- free thesis. When the focus of the discussion is shifted to a different direction, the attention immediately goes to the question as to how much of the observed organizational differences should be attributed to cultural forces of the respective contexts. It would not be difficult to conclude that the inconsistency in the relationship of variables are caused by the differences in cultures

This study was designed to provide a specific picture as to how the variables of culture were related to the variables of organizations. For that purpose, relationship between organizational and cultural variables were assessed. Findings revealed that in the Nepalese context respondents' tolerance for uncertainty and their orientation toward individualism were related to the variables of structure. Therefore, tolerance for uncertainty and individualism as the dimensions of culture can be identified as the predictors of organizational centralization and formalization. In the Alberta sample, these two variables of cultural values had an insignificant relationship with the variables of structure. This indicates that individuals' tolerance for uncertainty and their orientation toward individualism had no effect on perceptions of the level

of centralization and formalization found in the University of Alberta.

C. ISSUES RELATED TO METHODOLOGY

Sorge (1983:106) claimed that cross-cultural research guided by a contingency approach was often felt to be unsatisfactory because it relegated culture to a residual variable, i.e., to what was unexplained by the more common contingency variables. There is a growing feeling that culture should not be undrestood as an object composed of vague phenomena. In this matter, a useful step would be to explore the dimensions of culture. According to a commonly accepted definition, culture consists of symbols or meanings reflected in individuals' beliefs, values, and preferences (Keesing:1974, Deal and Kennedy:1983, Rohner:1984, and Child:1981). By utilizing this definition as the fundamental guideline, attempts were made to measure individual values as the dimension of culture.

Measurement of Values

There seems to be a consensus among scholars to utilize values (social or individual) as operational indicators of culture. Values indeed are one among a few reliable indicators that reflect the symbols and meanings shared by a social group. A debate, however, continues with respect to the methods used to measure individuals' values. Some researcher hold a strong belief that a value system is fundamentally a qualitative phenomenon. An appropriate analysis of this system deserves a qualitative operational treatment. A number of scholars (Rokeach:1967, 1973, Feather:1975, England:1975, Bales and Coach:1969), on the other hand, attempted to investigate value system by utilizing quantitative techniques.

There are two types of methods which are generally used to measure values -- ranking method and rating method. A number of factors were considered while selecting a method suitable for this study. Rankin and Grube (1980) contended that ranking method has a severe scaling problem. Responses drawn from the ranking procedure are ipsative in nature, i.e., the sum of the ranking scores over all the values is a constant between individuals. Rankin and

Grube (1980:234) further stated:

> purely ipsative measures may only be used legitimately for *intraindividual* comparisons and that the intercorrelations among scores are interdependent, which affects interitem correlations, reliability estimates, and makes certain multivariate techniques inappropriate.

These limitations of ranking procedure indicate that the scales are not appropriate for a study which intended to compare the value orientation of different cultural or national groups by aggregating the responses given by individuals. Ng (1982:170) observed a similar problem. He noted:

> The ranks assigned by a respondent to the values. . . [listed in an instrument] are nothing more than an indication of the hierarchical ordering of the values made by the respondent under the testing situation. No direct comparison of the value rankings of two respondents -- much less of two cultural groups -- can be made with certainty unless it is also assumed that ranks established by one respondent correspond in absolute terms to those established by the other. Such an assumption may be invalid.

In view of these limitations of ranking procedure, a rating-scale was chosen to measure individuals' values. Data drawn from the application of this procedure were easy to compare, and such data made possible a correlational analysis between a particular value and a variable of structure.

In spite of these advantages associated with rating procedure, it is indeed difficult to ascertain whether a correct measurement of values is possible by asking subjects to respond to a few questionnaire items. The factor analysis of the items constructed for the measurement of values revealed that most factors emerged from the analysis explained less than ten percent of variance except the first three factors. In both samples, the first three factors, which formed the scales utilized for comparison, explained approximately 50 percent of cumulative variance. In other words, the sample explained the part of the universe which the study presented as values.

One reason for this is that the universe of human value is not adequately defined. Most of the instruments used in contemporary research, including the one operationlized in this study, had difficulty in selecting appropriate items to represent the universe of human values. The process becomes even more complicated when a researcher attempts to develop one set of

items to explore two different value systems. Organizational structure and job satisfaction were the most researched areas of study. The literature, therefore, provided a sound basis for developing a good instrument.

Comparable Samples and Common Instrument

In comparative research, the methodologicl debate centers around the issue of comparable samples and the use of common instrument for each sample. For decades anthropologists developed the tradition of comparative research. As the literature reveals, two distinct approaches were employed in the explorations of cross-cultural reality. Those researchers who intended to explore variations in a given phenomenon gathered inferences from widely different samples. The purpose was to develop a typology as extensive as possible. In contrast, as Elder (1976:211) noted, others attempted to "identify the "essence" of some phenomenon by discarding the "accidentals" (in a manner similar to the phenomenological process of eidetic reduction)."[2] With fundamental differences in the methodology followed by these two approaches, both emphasized a process of gathering data from a widely different sample range.

In the field of anthropology, researchers also attempted to generalize the phenomena gathered from markedly different settings. They argued that if phenomena are categorized at very general levels, even unique phenomena can be fitted into categories of nonunique phenomena. To explain this Elder (1976:216) exemplefied the Hindu caste system. The caste system of India is unique and complex. The underlying construct of the caste system can be

---

[2]To explain how one can extract the essence from the accidentals, Elder (1976:212) gave an example of slavery as a topic of investigation and maintained that "The central methodological task is basically conceptual: what features distinguish cases of slavery from noncases, and what essentials do all cases of slavery share in common, even though they differ from each other in accidentals? As with the approach identifying the range of possible variations for a given phenomenon, this approach identifying essences requires gathering as widely differing a sample range as possible (e.g., slavery by capture vs slavery by sale, ethnically homogeneous vs ethnically heterogeneous slavery, short-term vs life-long slavery, etc) to enable one to peel away the largest numbers of accidentals in order finally to establish the core essences."

seen as a status hierarchy and ranking systems meeting the definition of a status hierarchy. If one is interested in systematic relationship between status hierarchies on one hand, and say, economic hierarchies on the other, he could treat Indian caste system as merely one of several cases from which to derive generalizations.

An argument of this nature stems from a belief that generalizable facts emerge even from unique phenomena. To establish valid universals, inferences should be gathered from samples as extensive and as varied as possible. Anthropologists seemed to be guided less by methodological prescriptions such as matched samples and control of variables. As has been described earlier, a different trend is visible in comparative studies of organizations. The culture-free and contingency writers emphasize matching samples to acquire evidence of convergence in organizational characteristics. The objective of a close matching of organizations that are compared is to permit useful comparison by controling a range of potential influences regarded as extraneous to the immediate interest of the study, i.e., to draw a picture of organizational realities across-nations which is not over-shadowed by variables that are irrelevant. A study of this nature may produce meaningless results. For example, researchers oriented toward such practice would deliberately select organizations for comparison that are basically similar. As Maurice (1979:44) contended, the findings of such a comparison may produce misleading results, which, in effect, undermines the possibility of real testing of differences in the characteristics of organizations around the world.

Even the explorers of universal phenomena in anthropology and sociology are very much concerned about independence of samples they compare. Elder (1976:217) stated:

> If two societies exhibit the same juxtaposition of institutions or traits, how does one know those two societies really represent two independent cases of that juxtaposition? What if society A "borrowed" the juxtaposition from society B, in which case the juxtaposition is historical rather than functional? What if A and B are merely variants of some common overarching society C? In either cases, what appear to be two cases may actually be two illustrations of the same case, in which event the cross-national comparison has not produced any further evidence for the generalization of the juxtaposition than did the single-nation observation.

A degree of certainty is needed to be assured that the organizations compared are independent cases.

A comparative study, regardless of its conceptual orientation, (i.e., whether toward culturalist or contingency perspective), attempts to measure the same variables in different organizations. The debate centers around the method used for the measurement of the variables. Culturalists contend that the details of everyday life are so variant among societies that one must not use similar devices to measure them. An instrument developed for one specific context gathers information which otherwise is impossible by standardized instrument. This argument has certain merits. But how would one know that two instruments used in different samples measured a similar variable of organization or a variable of similar construct? Comparison of two samples would be meaningless if the basis of analysis (i.e., variable) is not similar. The literature reveals that a number of studies used single instrument (identical in all samples) to collect data from various settings. The results of this study suggest that one instrument can be used in different samples across-nations. If the instrument is carefully developed through the process of pilot-testing, it may very well increase its ability to draw adequate information from various samples. A number of other studies have used different instruments in various samples. There is an argument that different instruments may draw functionally equivalent information that can be used as the basis of comparison.

Whether to use identical instrument or instruments that are functionally equivalent is determined by the objectives of the study. If a study intends to explore similarities and differences in organizations at a broad conceptual level, the use of functionally equivalent instruments can provide needed informations. Adler (1984:50) noted:

> Unlike domestic replication studies in which standardization across research settings is crucial, in comparative management research the aim is to have equivalent approaches to the research in each cultural setting. At a sufficiently high level of abstraction, the concepts and approaches must be identical. But at lower levels of abstraction -- generally at the level of operationalizing the concepts and approaches -- the definitions and methodologies should be culturally equivalent. The researcher must determine a way to design the study so that the ***meaning*** in the two or more cultures is most similar.

For example, by interviewing the respondents in Canada and by utilising a questionnaire in Nepal one can develop a understanding of the level of centralization and formalization of the universities located in the respective countries. Even the cross-sample similarity and difference

in the relationship between centralization and formalization can be examined by the use of such variant method of data collection. Therefore, as Van de Vijver and Portinga (1982:389) stated, invariance of method is not an essential theoretical requirement as long as the validity of the measurements across samples in respect of the same construct is properly established.

Several studies, however, emphasized a rigid testing of hypotheses. Similar to them, this study used identical scales across samples to collect information concerning the cultural and organizational variables. The use of identical scales was essential for making comparisons across the samples. It is important to note that, in this study, the equivalence of the scales was supported by factor analysis of the items.

Cross-cultural psychologists seem to prefer a methodology that emphasizes the use of identical scales in samples. Van de Vijver and Portinga (1982:393) noted that a comparison implies that there is a common scale on which the comparison is made. Guided by the concept of a common scale this study attempted to explore common factor structure in both sets of data acquired from Alberta and Nepal. To establish a common scale for the purposes of comparison, the items used to collect data were factor analysed. In the scale of a particular variable, only those items were included which were loaded on similar factors in both samples.

Information required to make a valid comparison can be obtained even when nonidentical measures are used in different samples. However, it is difficult to achieve an equal scale, in true sense of meaning, when formally different measures are applied. The transformation of scale between two physical measurements, say between kilometre and miles or kilogram and pound, is possible. But how accurate one can be if he attempts to transform the measurement of values and behavior from one scale to another?

D. SUMMARY

The discussion focused on three major areas: (a) the results of this study were analysed in relation with the findings of other relevant studies, (b) the theoretical implications of the results were explored, and (c) the issues related to the methodology of the comparative

research were discussed. The results of the study indicated that the two universities were different in terms of their structure and members' satisfaction. The decentralized structure of the U of A reveals that the university administration places importance on collegial authority. The pattern of authority distribution found in the University of Alberta can be linked with the general trend of academic administration evident in most North American universities developed from the British tradition. Such a system has strong ideological support for the doctrine of academic freedom. The administration at Tribhuvan University in Nepal, which developed in a different cultural context, has a strong bureaucratic orientation.

Attempts were made to examine whether there is empirical support in the results of this study for either the culture-free or culture-specific theories in comparative research. The differences in organizational structure, members' satisfaction and value orientations seem to refute the general assumption that organizations across cultures are similar. From the culture-free perspective, the observed differences between the Nepalese and the Canadian universities could be the outcome of varying contingencies faced by respective universities. The differences, therefore, may not necessarily be created by specific cultural forces.

In comparative research, the methodological debate centers around the issues of comparable samples and the use of common instrument. In the field of anthropology researchers attempted to explore variations in given phenomena by gathering inferences from widely different samples while the contingency writers in comparative administration argue that convergence or divergence in the characteristics of organizations cannot be diagnosed unless the contextual variables of organizations are controlled. In other words, organizations that are compared should be of similar size, should have adopted similar technology, should have similar market and/or clientele, and the like. One may argue what significant difference could be expected from comparing organizations that are similar in all respects. An instrument developed for a specific context may gather information which otherwise is impossible by a standardized instrument. A comparison of two organizations would be meaningless if the basis of analysis (i.e., variable) is different. If different instruments are used in various samples, it

is difficult to be assured that these instruments are measuring variables of similar constructs. The results of this study suggest that one instrument can be used in different samples. A carefully developed instrument may draw adequate information from various samples.

Chapter VII

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

In this chapter, a summary of the study is presented. In addition, the conclusions and implications of the study are outlined.

A. SUMMARY

The summary of this study highlights (a) background and purposes of the research, (b) conceptual framework, (c) methodology, (d) scales of measurement, (e) major findings, and (f) discussion of findings.

Background and Purposes of the Study

The results of empirical research and organizational theories founded on such research are of interest to scholars who work in different parts of the world. Researchers who attempt to compare organizations in different countries are confronted by a fundamental question as to what extent organizations located in specific social contexts can be analysed by the use of generalized models. The issue concerns the validity of applying particular methods in more than one setting. In this study, selected characteristics of a Nepalese university organization (Tribhuvan University) were compared with those of a university in Canada, namely, the University of Alberta. The purpose of the study was to address some major theoretical and methodological issues of cross-cultural research on organizations.

The literature presents two alternative theoretical frameworks for the cross-cultural comparative study of organizations. These are the culture-free or universalistic perspective, and the culture-specific or culturalist prespective. Most of the comparative studies of organizations are guided by either one of these two conceptual frameworks. The culture-free perspective is

based on the assumption that organizations in different nations or cultures are basically the same. Research which is conducted within this framework is oriented towards developing theoretical generalizations of the characteristics of organizations. Theories abstracted from such generalizations are intended to be applied universally. In other words, the genotypical similarity in the chacteristics of organizations provides a basis for applying generalized theories in different contexts. In contrast, the research which is guided by culture-specific perspective attempts to use distinct methods to analyse organizations. The culturalists assume that characteristics of organizations are the products of historical and cultural forces found in a particular context. Since the socio-cultural phenomena of one national context are largely different from others, organizations located in these national settings are bound to differ from each other. Such variation restricts generalizability of organizational characteristics across nations and/or cultures.

Culturalists and the universalists espouse contrasting aims and methods for achieving the desired results. Research conducted within the culture-free perspective is inclined to explore similarities among organizations in different settings. Such empirical evidence of similarities facilitates the process of generalization. In contrast, research guided by the culture-specific perspective is directed toward investigating differences in organizations across cultures. Culturalists argue that individuals, as actors in a society, have similar preferences which differ from the preferences of individuals in other societies. The members of an organization, as a social group, adopt specific administrative practices that are consistent with these preferences, and administrative practices vary with the socio-cultural context. Consequently, organizations with fundamentally different administrative practices cannot be analysed by the application of a generalized model.

This study began with the assumption that a comparative analysis of organizations need not be restricted to selecting one of these approaches. The art of organizational comparison consists of exploring both similarities and differences between units that are compared. The assumption on which this study rests was that the two university organizations which were

compared might have both generalizable (thus universal) and culture-specific (non-generalizable) characteristics. From this perspective, the following research questions were formulated:

1. What are the similarities and differences between academic staff members of Tribhuvan University, Nepal, and the University of Alberta, Canada, on perceptions of organizational structure, satisfaction and cultural values ?
2. What are the similarities and differences between faculties at the Nepalese university and at the Canadian university on the variables of organizational structure, member satisfaction and cultural values ?
3. What are the relationships among the variables of organizational structure, satisfaction and cultural values in the Nepalese university and in the Canadian university ?
4. What are the similarities and differences between the Canadian and the Nepalese universities in terms of relationships among structure, member satisfaction and cultural values ?

The extent to which the results of the analyses supported either the culture-free or culture-specific models was also explored.

Conceptual Framework

Six major concepts were drawn from the review of the theoretical literature on organizations and the results of relevant studies:

1. Socio-cultural phenomena are related to the structural design of organizations.
2. The structure of an organization influences members' satisfaction.
3. There are two contrasting perspectives in the study of organizations across cultures: (i) organizations in different cultures can be analysed by the application of universal measures formulated from globally drawn inferences; (ii) deep rooted forces of culture mold organizations into different entities -- characteristics of organizations which are fundamentally different cannot be compared by the application of universal models.

4. Two distinct objectives are implicit within the two perspectives. One intends to explore similarities that exist in the characteristics of organizations across cultures. The other emphasizes differences between organizations.
5. Culture appears to be a complex whole that encompasses unlimited components. The existing complexity in the definition of culture is the reason that a number of comparative studies relegated culture to residual variables, that is, the phenomena not explained by commonly used variables.

In view of these concepts, the research design of this study was developed in a manner which incorporated useful ideas from the culture-free and culture-specific theories of comparative research. Culture was not relegated to a residual variable, to what was unexplained by the more commonly operationalized contextual variables. Instead, dimensions of culture were defined, and through use of operational indicators, attempts were made to measure certain aspects of the culture in terms of selected dimensions of value orientations. The basic assumptions were that (a) culture is altogether a different matter from what has commonly been described as organizational contingencies, and (b) culture should not be understood as a vague notion.

On the basis of the works of Parsons (1973) and Geertz (1973), culture was defined as the meaning and symbols shared between individuals of a society. It was assumed that to study culture is to analyse codes of meaning shared by social groups. Such meaning and symbols are reflected in individuals' beliefs, values and preferences. Value orientations of respondents in the two national contexts were used as the operational indicators of shared culture.

The approach adopted in the study was designed to test empirically the relative merits of the alternative perspectives of the comparative research through (a) developing a valid instrument which could be applied in both contexts that were compared, and (b) measuring selected characteristic phenomena of the university organizations and their cultural environments.

To achieve the objectives of the study, a nomothetic approach of inquiry and analysis was followed. Guided by this approach, the differences and similarities between the two samples were systematically analysed. Similarities and differences between the samples were explored in terms of clearly defined variables. These variables were structural centralization, formalization, overall job satisfaction and satisfaction with structure. In addition, respondents' value orientations -- conformity, individualism, and tolerance for uncertainty -- were analysed as the indicators of the culture(s) they shared.

Valid comparison cannot be made without measuring identical variables in the various samples that are being compared. To acquire a certain degree of assurance that similar characteristics of organizations and culture(s) were measured in both samples, similar instruments were operationalized, similar techniques were used to analyse both sets of data, and identical scales were identified which formed the basis of comparison. Culturalists, who view the design of organizations as the product of specific cultural forces, prefer to use an idiographic approach to analyse organizations in different contexts. The idiographic approach, which is open to uniqueness and inimitability, helps to develop a record of the specific configuration of an organization in a particular cultural setting. Attention is given primarily to the explorations of organizational and cultural phenomena that are peculiar and unpredictable. Idiographic approaches yield comprehensive case-studies which focus on the historical roots of certain organizational practices and the way they reflect culture. Methodologically, one case study can be different from others. Each case study applies a specific approach suitable for its purposes. Organizations analysed by two different case studies cannot be compared in precise terms.

Methodology

The design of this study was descriptive and relied on quantitative techniques of data collection and analysis. An instrument was developed to measure degrees structural centralization and formalization in the two university organizations, members' satisfaction with

structure and overall job satisfaction, and members' value orientations. A pilot-test of the instrument was conducted and the revised instrument then used to obtain the responses of 262 professors at the University of Alberta, Canada, and 207 professors at Tribhuvan University in Nepal.

Factor analyses were conducted to define the scales which were used to measure the variables. A series of *t* tests was conducted to explore differences between the two samples. The analysis of variance technique was used to investigate the differences in means among the four faculties at TU and the U of A. These faculties were: (a) Arts (U of A) or Humanities and Social Sciences (UT), (b) Sciences, (c) Business (U of A) or Commerce and Business (TU), and (d) Education. Correlation coefficients were used to explore interrelationships among the variables.

Scales of Measurement

One of the objectives of the study was to develop scales which measured similar factors in both sets of data from different contexts, and then to use them as the basis of comparison of the two universities. In light of this objective, the factor analyses were carried out (a) to explain the underlying factors of each of the seven variables of university organizations and culture, and (b) to identify a 'common factor structure' emerging from both sets of data.

For the measurement of structural centralization and formalization, sets of nine and eight items were chosen. Each of these two sets of items contained three factors. The three factors which emerged from the items developed to measure centralization of decision-making authority were (a) centralization of selection and promotion decisions, (b) centralization of decisions related to departmental operations, and (c) centralization of instructional decisions. From the analysis of both sets of data, performance standards, rules, and supervision were identified as the three factors of structural formalization. Two alternative methods were applied to establish the scales.

1. To explore the correlations among the variables, all of the items selected for the

measurement of each of the variables of structure were used as one measure.

2. To measure differences between the two universities, the three factors of centralization and the three factors of formalization were used as separate scales. In other words, differences between universities were calculated in terms of each of the factors of centralization and formalization.

A similar method was applied for the measurement of respondents' satisfaction with structure. Satisfaction with (a) administrative practices, (b) performance evaluation and rewards, and (c) discretionary power and freedom were the factors that emerged from eight items used to measure respondents' satisfaction with structure. This variable was measured by operationalizing all of the items as one measure and by using the above three factors as separate scales. The scale used to measure respondents' overall job satisfaction contained two items.

The analysis indicated that (a) conformity, (b) individualism and (c) tolerance for uncertainty were the three factors in the items selected for the measurement of respondents' value orientations. These factors were identified as the dimensions of value orientation. The items associated with each of these three factors were operationalized as a separate scale.

Findings

The analysis revealed that several differences existed between the Alberta and the Nepalese samples. As has been described above, the differences between the two universities were analysed in terms of the structural centralization and formalization of the respective organizations, members' satisfaction with structure, overall job satisfaction and value orientations. The data indicated that the organizational structure of Tribhuvan University in Nepal was more centralized and more formalized than that of the University of Alberta. Substantial differences were observed in members' satisfaction and value orientations. The findings indicated that the Nepalese respondents were less satisfied with the way their university was structured, and they experienced less satisfaction with the overall conditions of the job. On

the other hand, the respondents from Alberta were comparatively more satisfied with their job and with the structure of their organization. In addition, they indicated less conformity to social and organizational standards and authority, and were more individualistic and more tolerant of uncertainty compared to their Nepalese counterparts.

Comparisons were also made at the faculty level for both TU and the U of A. The purpose of the analysis was to determine whether or not there were differences across faculties at the same university on the variables under study. The results indicated that, with few exceptions, the members of different faculties at the two universities were not significantly different in terms of their perception of structural centralization and formalization, their satisfaction and value orientations.

In addition, the results of the analyses indicated that there were similarities and differences in the relationship of variables across the two samples. Some variables were related similarly in the two settings. For example, in both the Alberta and the Nepalese samples formalization was positively correlated with centralization, and centralization was negatively related with both job satisfaction and satisfaction with structure. In each sample, conformity was associated positively with centralization, formalization, satisfaction with structure, and job satisfaction. All of these correlations, however, were weak. Apart from these cross sample similarities in relationship, a number of variables were related differently in two samples. For example, in the Alberta sample formalization was positively correlated with both overall job satisfaction and satisfaction with structure. In the Nepalese sample, formalization was negatively related with the two satisfaction measures. The correlation values indicated that the relationships among these variables was very weak in both samples.

In the Nepalese sample, individualism and tolerance for uncertainty were negatively correlated with centralization and formalization, but were positively correlated with job satisfaction and satisfaction with structure. In the Alberta sample, the same variables of cultural values (i.e., individualism and tolerance for uncertainty) were differently related to the variables of structure and satisfaction. The data indicated that individualism and tolerance for

uncertainty had no relationship with centralization, formalization, satisfaction with structure and overall job satisfaction.

Discussion

Analysis revealed that the decision making authority at the U of A is decentralized and that the university administration places low reliance on prescribed rules. Collegial authority seems to be one basic characteristic of the administrative structure in the University of Alberta. The practice of professorial control and collegial authority has been widespread in North America and in Great Britain. Such a system has strong ideological support in the doctrine of the academic freedom. The Tribhuvan University system, which developed in a different socio-cultural context, has a strong bureaucratic orientation, because it is more centralized and more formalized. At the U of A collegial rules seemed to govern the activities of the academic faculties, whereas prescribed administrative rules and periodic supervision were the dominant characteristics of the TU administrative system.

The study revealed differences in members' satisfaction and their value orientations. Compared with their Canadian counterparts, the Nepalese professors were less satisfied with their work, less individualistic, less tolerant of uncertainty, and more inclined to conform to social and organizational authority and standards. These findings are consistent with the results of other studies in similar contexts. A number of studies found that the North American employees were less authoritarian, and showed less tendency towards uncertainty avoidance compared to the employees in the Indian subcontinent in particular, and several other countries in different parts of the world.

As the findings indicated, the variables of structure, satisfaction and cultural values were differently related in the two samples. These differences can be attributed to the particularities of culture which differ with nationality and region. However, some variables demonstrated similar relationships across the two samples which seem to support the notion of stable relationships across cultures.

The findings described above revealed inconsistency in the pattern of relationships among variables across samples. While some variables demonstrated a similar relationship in both samples, others did not. In general, dissimilarities in the relationships among variables seemed to outweigh the similarities. The similarities in the relationships among variables in the two samples supported the notion of stable relationships, which is a fundamental premise of the culture-free perspective. On the other hand, the observed differences seemed to challenge the notion.

B. CONCLUSIONS

The following conclusions were drawn from the results of this study:

1. At the time of the study the organizational structure of Tribhuvan University in Nepal was significantly different from that of the University of Alberta. Compared with the Nepalese university, the U of A was less centralized and less formalized. The units, committees and councils, which function on behalf of the highest administrative level of TU (i.e., Vice-Chancellor's Office) exerted the greatest influence over the process of decision making. At the U of A, many important decisions were made at the department level. Furthermore, a reliance on prescribed rules and periodic supervision was the inherent characteristic of the TU administration. The academic faculties at the U of A indicated that their work was comparatively less supervised by higher authorities and was less governed by prescribed standards and rules than appeared to be the case at TU.
2. The professors at the two universities experienced different levels of satisfaction. Compared with their Nepalese counterparts, the professors at the U of A were more satisfied with the way their university was structured and experienced a higher level of overall job satisfaction.
3. Cross-sample differences existed in value orientations. The professors at TU were more inclined to conform to social and organizational standards and authority than were their Alberta counterparts. Moreover, the Nepalese professors were less individualistic and had

less tolerance for uncertainty as compared to the professors at the U of A who were comparatively more individualistic and more tolerant of uncertainty.

4. The relationships among the variables of cultural values and the variables of organizational structure and satisfaction were mostly different across the two samples drawn from Nepal and Alberta. However, some variables demonstrated similar relationships in both samples. A comparison between the cross-sample similarities and cross-sample dissimilarities in the relationships among variables revealed that dissimilarities outweighed the similarities.

5. Significant differences between the two universities in terms of organizational structure, members' satisfaction and value orientations tend to provide support for the fundamental premise of the culture-specific theory, i.e., organizations differ with culture. However, universalists claim that such differences are purely incidental and, therefore, cannot be used as complete evidence either to support or to reject a theory. The concept that organizations across the world are basically similar, or are free of cultural forces, can be challenged if it is empirically proven that the organizational variables relate differently in two cultural contexts. The strength of the culture-free theory stems from empirical evidence of stable relationships among variables. Results of this study revealed important differences in the relationships of variables across the two samples. Theoretically, these differences support the culturalist or culture-specific argument, and at the same time, challenge the concept that organizations do not differ with culture and nationality.

6. A conclusion that the evidence of cross-sample differences in the relationships among variables refutes the fundamental premise of the universalistic or culture-free perspective must, however, be made with a certain degree of caution. Universalists argue that differences could merely be the effect of dissimilar contingencies (e.g., technology, interdependence) faced by organizations that are compared. They claim that organizational variables relate similarly across national and cultural settings if the effects of contingencies are controlled. In other words, if organizations in various cultural contexts are similar in terms of their size and the technology they use, and have similar interdependence with

other organizations, then the structural variables of these organizations will demonstrate similar relationships. Since the two universities compared in this study did not face similar contingencies, differences are to be expected.

7. This study suggested that valid data can be drawn from different samples by utilizing a single instrument. The instrument, however, should be pilot tested in all contexts from which data are expected to be drawn, and the scales for the comparison should be established by the application of a technique such as factor analysis. There is an argument that a meaningful comparison can be made even when equivalent but non-identical instruments are used in different samples which are compared. Such an argument may have some merit. However, it is difficult to establish that the scales emerging from different instruments are, in fact, similar. A use of dissimilar scales may increases the possibility of comparing noncomparable phenomena.

C. IMPLICATIONS

The implications of the findings for research and for administrative practices are presented below.

1. The cross-sample differences in organizational structure, members' satisfaction and their value orietations may be seen as somewhat greater than expected. This raises two different questions, (a) to what extent are the results of the study able to reflect the reality of the situations that exist in the two universities? and (b) what are some other explanations for these differences? For example, factors which were not considered in this study, such as physical facilities and job related benefits, may have contributed to the differences in the levels of job satisfaction experienced by the Nepalese and the Canadian professors. These questions should be considered in designing future studies.
2. Attempts to define culture and to measure the dimensions of culture have implications for organizational research. The methodology applied in this study to measure culture may be useful for future research.

3. The scales used to measure value orientations provide a basis for developing a more comprehensive instrument. The instrument used in this study can be modified to ensure that items reflect the same degree of specificity when used in different contexts.
4. The findings of this study revealed that the administrative system at the U of A placed importance on decentralization of decision making authority, which seems to have an ideological support in the doctrines of academic freedom. Individuals who were working in this environment experienced greater job satisfaction. In the Nepalese university system where decision making authority was centralized, the level of satisfaction in the academic faculties was low. These findings may have implications for attempts directed at improving effectiveness of university organizations. Hence, the Nepalese executives, both in the immediate university environment (e.g., Campus-Chiefs, Deans and Vice-Chancellor) and those who are more distant from it (e.g., concerned decision makers in the Ministry of Education) may find reason to examine critically the finding that the professors at TU experienced low job satisfaction and perceived that the administrative system of their university was highly centralized and formalized.

More generally, the outcomes of this study have potential for influencing approaches to designing studies of educational organizations in different cultural settings. Specifically, the results support the position that future research should be guided by a design which includes relevant cultural variables. Some methodological issues related to the cross-cultural research such as the development of valid scales for comparison have also been addressed. The scales developed in this study may be of particular interest to researchers in educational administration, and the procedures may provide a basis for developing improved scales.

REFERENCES

Adler, N. J. 1983a. "Cross-Cultural Management Research: The Ostrich and the Trend," **Academy of Management Review**, 8: 226-232.

_____ 1983b. "A Typology of Management Studies Involving Culture," **Journal of International Business Studies**, 14(2): 29-47.

_____ 1983c. "Cross-Cultural Management: Issues to be Faced." **International Studies of Management and Organization**, 13: 7-45.

_____ 1984. "Understanding the Way of Understanding: Cross-Cultural Management Methodology Reviewed," **Advances in International Comparative Management: A Research Annual**, Connecticut: Jai Press Inc.

Aiken, M. and S. B. Bacharach. 1979. "Culture and Organizational Structure and Process: A Comparative Study of Local Government Administrative Bureaucracies in the Walloon and Flemish Regions of Belgium," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge and Kegan Paul.

Ajiferuke, M. and J. Boddewyn. 1970. "Culture and Other Explanatory Variables in Comparative Management Studies," **Academy of Management Journal**, 13: 153-163.

Altemayer, B. 1981. **Right-Wing Authoritarianism**, Manitoba: University of Manitoba Press.

Azumi, K. 1974. "Japanese Society: A sociological Review," in Tiedemann, A. E. (ed.), **An Introduction to Japanese Civilization**, New York: Columbia University Press.

_____ D. J. Hickson, D. Horvath and C. J. McMillan. 1974. "Cross-National Variation in Organizational Structure." Paper presented to the International Sociological Association, Toronto.

_____ and C. J. McMillan. 1977. "Management Strategy and Organizational Structure: A Japanese Comparative Study." Working paper, Faculty of Administrative Studies, York University, Toronto.

Bachman, J. G., C. G. Smith and J. A. Slesinger. 1966. "Control, Performance, and Satisfaction: An Analysis of Structural and Individual Effects," **Journal of Personality and Social Psychology**, 4: 127-136.

Bales, R. F. 1970. **Personality and Interpersonal Behavior**, New York: Holt, Rinehart and Winston.

_____ and A. S. Couch. 1969. "The Value Profile: A Factor Analytic Study of Value Statement," **Sociological Inquiry**, 39: 3-17.

Belasco, J. A. and J. A. Alutto. 1972. "Decisional Participation and Teacher Satisfaction," **Educational Administration Quarterly**, 8: 44-58.

Berger, C. J. and L. L. Cummings. 1979. "Organizational Structure, Attitudes, and Behaviors," in Staw, B. M. (ed.), **Research in Organizational Behavior**, Connecticut: Jai Press Inc.

Berry, J. W. 1980. "Introduction to Methodology," in Triandis, H. C. and J. W. Berry (eds.), **Handbook of Cross-Cultural Psychology (Vol. 2)**, Boston: Allyn and Bacon.

Bhagat, R. S. and S. J. McQuaid. 1982. "Role of Subjective Culture in Organizations: A Review and Directions for Future Research," **Journal of Applied Psychology (Monograph)**, 67: 653-685.

Bishop, L. K. and J. R. George. 1973. "Organizational Structure: A Factor Analysis of Structural Characteristics of Public Elementery and Secondary School," **Educational Administration Quarterly**, 9: 66-80.

Blau, P. M. 1965. "The Comparative Study of Organizations," **Industrial and Labor Relations Review**, 18: 323-328.

_____ 1974. **On The Nature of Organizations**, New York: John Wiley.

_____ and R. A. Schoenherr, 1971. **The Structure of Organizations**, New York: Basic Books.

Blauner, R. 1964. **Alienation and Freedom**, Chicago: Chicago University Press.

Child, J. 1972. "Organization Structure and Strategies of Control: A Replication of the Aston Study," **Administrative Science Quarterly**, 17: 163-177.

_____ 1976. "Predicting and Understanding Organization Structure," in Pugh, D. S. and C. R. Hinings (eds.), **Organizational Structure: Extensions and Replications**, London: Saxon House.

_____ 1981. "Culture, Contingency and Capitalism in the Cross-National Study of

Organizations," in Cummings, L. L. and B. M. Staw (eds.), **Research in Organizational Behavior (vol. 3)**, Connecticut, Greenwich: Jai Press.

_____ and A. Kieser. 1979. "Organization and Managerial Roles in British and West German Companies: An Examination of the Culture-Free Thesis," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge & Kegan Paul.

_____ and M. Tayab. 1983. "Theoretical Perspectives in Cross-National Organizational Research," **International Studies of Management and Organization**, (Winter 1982-83) 12: 23:70.

Clark, B. R. 1983. **The Higher Education System: Academic Organization in Cross-National Perspective**, Berkeley: University of California Press.

Cohen, M. and J. March. 1974. **Leadership and Ambiguity: The American College President**, New York: McGraw Hill.

Coughlan, R. J. 1971. "Job Satisfaction in Relatively Closed and Open Schools," **Educational Administration Quarterly**, 7: 40-59.

Deal, T. E. and A. A. Kennedy. 1983. "Culture A New Look Through Old Lenses," **The Journal of Applied Behavioral Science**, 19: 498-505.

Demerath, N., R. Stephens and R. Taylor. 1967. **Power, Presidents, and Professors**, New York: Basic Book.

DeTornyay, R. 1981. "The Dean as Human Person," **The Dean as Person: Rights and Responsibilities (Vol.4.)**, Washington. D. C: AACN.

Dewar, R. and J. Werbel. 1979. "Universalistic and Contingency Predictions of Employee Satisfaction and Conflict," **Administrative Science Quarterly**, 24: 426-448.

Donaldson, L., J. Child and H. Aldrich. 1975. "The Aston Findings on Centralization: Further Discussion," **Administrative Science Quarterly**, 20: 453-460.

Doorn, J. V. 1979. "Organizations and the Social Order: A Pluralist Approach," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge & Kegan Paul.

Douglas, J. D. (ed.). 1971. **Understanding Everyday Life**, London: Routledge & Kegan Paul.

Dunnette, M. D., J. P. Campbell, and M. D. Hakel. 1967. "Factors Contributing to Job-Satisfaction and Job-Dissatisfaction in Six Occupational Groups," **Organizational Behavior and Human Performance**, 2: 147-174.

Elder, J. W. 1976. "Comparative Cross-National Methodology," **Annual Review of Anthropology**, 5: 209-230.

England, G. W. 1975. **The Manager and His Values: An International Perspective**, Cambridge: Ballinger.

_____ and I. Harpaz. 1983. "Some Methodological and Analytic Considerations in Cross-National Comparative Research," **Journal of International Business Studies**, 14(2): 49-59.

_____, A. R. Negandhi and B. Wilpert (eds.). 1979. **Organizational Functioning in A Cross-Cultural Perspective**, Ohio, Kent: Kent State University.

_____ and A. R. Negandhi. 1979. "National Contexts and Technology as Determinants of Employees Perceptions," in England, G. W., A. R. Negandhi and B. Wilpert (eds.), **Organizational Functioning in A Cross-Cultural Perspective**, Ohio, Kent: Kent State University.

Etzioni, A. 1961. **A Comparative Analysis of Complex Organizations**, New York: Free Press.

Everett, J. E., B. W. Stening and P. A. Longton. 1982. "Some Evidence for an International Managerial Culture," **Journal of Management Studies**, 19: 153-162.

Farmers, R and B. Richman. 1964. "A model for Research in Comparative Management," **California management Review**, 4: 55-68.

Feather, T. N. 1975. **Values in Education and Society**, New York: Free Press.

Ferber, R. and P. J. Verdoorn. 1962. **Research Methods in Economics and Business**, Toronto: McMillan Co.

Frank, P. E. 1982. "Job-Satisfaction of Administrators of Academic Nurshing Units in Higher Education, as it Relates to Formal Organizational Structure." Unpublished Dissertation, University of Utah.

Geertz, C. 1973. **The Interpretation of Cultures**, New York: Basic Books.

Giddens, A. 1976. **New Rules of Sociological Method**, London: Hutchinson.

_____ 1979. **Central Problems in Social Theory**, London: McMillan.

Gilmer, B. V. H. and E. L. Deci. 1977. **Industrial and Organizational Psychology (4th ed.)**, New York: McGraw-Hill.

Goldner, F. H. 1979. "Internal Belief Systems and Ideologies About the Organizational Structure of Church and Industry," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London:Routledge & Kegan Paul.

Goodenough, W. H. 1981. **Culture, Language and Society (2nd ed.)**, Menlo Park, CA.: The Benjamin/Cummings Pub. Co.

_____ 1957. "Cultural Anthropology and Linguistics," in Garvin, P. (ed.), **Report of the Seventh Annual Round Table Meeting on Linguistics and Language Study**, Washington D.C.: Georgetown University.

Gross, E. and P. Grambsch. 1968. **University Goal and Academic Power**, Washington D.C.: American Council of Education.

_____ and _____ 1974. **Changes in University Organization: 1964-1971**, New York: McGraw Hill.

Guba , E. G. 1978. **Toward a Methodology of Naturalistic Inquiry in Educational Evaluation**, Los Angeles: The University of California.

_____ 1981."The Paradigm Revolution in Inquiry: Implications for Vocational Research and Development." Paper presented in National Centre for Research in Vocational Education Staff Development Seminar, Columbus, Ohio. ED212829.

_____ 1982. "Epistemological and Methodological Bases of Naturalistic Inquiry," **Educational Communication and Technology Journal**, 30: 233-252.

_____ and Y. S. Lincoln. 1981. **Effective Evaluation**, San Francisco: Jossey Bass.

Gunn, J. A. 1984. "Job Satisfaction of Senior High School Principals and Their Perceptions of School Effectiveness, Their Leadership and Their Bases of Influence." Unpublished Dissertation, University of Alberta: Edmonton.

Hage, J. 1965. "An Axiomatic Theory of Organizations," **Administrative Science Quarterly**, 10:

289-320.

_____ 1972. **Techniques and Problems of Theory Construction in Sociology**, New York: Wiley.

_____ 1980. **Theories of Organizations: Form, Process, and Transformation**, New York: Wiley.

_____ and M. Aiken. 1967. "Relationship of Centralization to Other Structural Properties," **Administrative Science Quarterly**, 12: 72-92.

Hall, R. H. 1962 "Intra-Organizational Structural Variation: Application of the Bureaucratic Model," **Administrative Science Quarterly**, 7: 295-308.

_____ 1963. "The Concept of Bureaucracy: An Empirical Assessment," **American Journal of Sociology**, 69: 32-40.

_____ 1982. **Organizations: Structure and Process (3rd ed.)**, Englewood Cliffs, N.J.: Prentice-Hall.

Harbison, F. and C. A. Myers (eds.). 1959. **Management in the Industrial world**, New York: McGraw Hill.

Herrick, H. C. 1974. "The Relationship of Organizational Structure to Teacher Motivation in Multiunit and Non-Multiunit Elementary Schools." Unpublished Dissertation, University of Wisconsin.

Herzberg, F. 1966. **Work and Nature of Man**, New York: World Publishing.

_____ , B. Frederick and B. Snyderman. 1959. **The Motivation to Work**, New York: Wiley.

Heydebrand, W. V. 1973. **Comparative Organizations: The Results of Empirical Research**, Englewood Cliffs. N. J.: Prentice-Hall.

Hickson, D. J., C. J. McMillan, K. Azumi and D. Horvath. 1979. "Grounds for Comparative Organization Theory: Quicksands or Hard Core?" in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge & Kgan Paul.

Hinings, C. R. 1979. "Continuities in the Study of Organizations: Churches and Local Government," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and**

Unlike, London: Routledge & Kegan Paul.

_____ and G. L. Lee. 1976. "Dimensions of Organization Structure and Their Context: A Replication," in Pugh, D. S. and C. R. Hinings (eds.), **Organizational Structure: Extensions and Replications**, London: Saxon House.

Hofstede, G. 1980. " Motivation, Leadership and Organization: Do American Theories Apply Abroad," **Organizational Dynamics**, (Summer) AMACOM: 42-63.

_____ 1980b. **Culture's Consequences: International Differences in Work-Related Values**, Beverly Hills: Sage Publication.

Holdaway, E. A. 1978a. "Teacher Satisfaction." An Alberta Report, Edmonton: The University of Alberta.

_____ 1978. "Facet and Overall Satisfaction of Teachers," **Educational Administration Quarterly**, 14: 30-47.

_____ J. F. Newberry, D. J. Hickson and R. P. Heron. 1975. "Dimensions of Organizations in Complex Societies: The Educational Sector," **Administrative Science Quarterly**, 20: 37-58.

Horvath, D., K. Azumi, D. J. Hickson and C. J. McMillan. 1976. "The Cultural Context of Organizational Control: An International Comparison," **International Studies of Management and Organization**, 6: 60-86.

House, R. J. and L. A. Wigdor. 1967. "Herzberg's Dual Factor Theory of Job Satisfaction and Motivation: A Review of the Evidence and a Criticism." **Personnal Psychology**, 20: 369-385.

Hunt, J. G. and J. W. Hill. 1969. "The New Look of Motivation Theory for Organizational Research," **Human Organization**, 28: 100-108.

Iles, R. L. 1984. "School Jurisdictional Reorganization: A Naturalistic Case Study of Conflict Management." Unpublished Dissertation, University of Alberta.

Imparato, N. 1972. "Relationship Between Porter's Need Satisfaction Questionnaire and the Job Descriptive Index," **Journal of Psychology**, 56: 397-405.

Keesing, R. M. 1974. "Theories of Culture," **Annual Review of Anthropology**, 3: 73-97.

Kelley, L. and R. Worthley. 1981. "The Role of Culture in Comparative Management: A Cross-Cultural Perspective, " **Academy of Management Journal**, 24: 164-173.

Kerlinger, F. N. 1973. **Foundations of Behavioral Research**, New York: Holt Rhinehart and Winston.

Kerr, C., J. T. Dunlop, F. Harbison and C. A. Myers. 1960. **Industrialism and Industrial Man**, Cambridge Mass.: Harvard University Press.

Kroeber, A. L. and C. Kluckhohn. 1952. **Culture: A Critical Review of Concepts and Definitions**, Cambridge Mass.: Harvard University.

_____ and T. Parsons. 1958. "The Concepts of Culture and of Social Systems," **American Sociological Review**, 23: 582-583.

Kuhn, T. S. 1970. **The Structure of Scientific Revolutions (2nd ed.)**, Chicago: University of Chicago Press.

Lammers, C. J. 1978. "The Comparative Sociology of Organizations," **Annual Review of Sociology**, 4: 485-510.

_____ and D. J. Hickson. 1979. "Towards A Comparative Sociology of Organizations," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge and Kegan Paul.

Lawler, E. E. 1973. **Motivation in Work Organizations**, Monterey, California: Brooks/Cole.

_____ and L. W. Porter. 1966. "Predicting Managers' Pay and Their Satisfaction with their Pay," **Personnel Psychology**, 19: 363-373.

_____ D. A. Nadler and C. Cammann. (eds.). 1980. **Organizational Assessment: Perspectives on the Measurement of Organizational Behavior and the Quality of Worklife**, New York: John Wiley.

Lemke, E. and W. Wiersma. 1976. **Principles of Psychological Measurement**, Chicago: Rand McNally.

Lincoln, Y. S. 1983. "The Substance of the Emergent Paradigm: Implication for Researchers." Paper presented at conference on Linking New Concepts of Organizations to New Paradigms for Inquiry. Sponsored by UCEA and University of Kansas.

Lincoln, J. R., M. Hanada and J. Olson. 1981. "Cultural Orientations and Individual Reactions to Organizations: A Study of Employees of Japanese-Owned Firms," **Administrative Science Quarterly**, 26: 93-115.

Locke, E. 1976. "Nature and Causes of Job Satisfaction," in Dunnette, M. D. (ed.), **Handbook of Industrial and Organizational Psychology**, Chicago: Rand McNally.

_____ 1969. "What is Job Satisfaction?" **Organization Behavior and Human Performance**, 4(4): 309-336.

MacKay, D. A. 1964. "An Empirical Study of Bureaucratic Dimensions and Their Relation to other Characteristics of School Organizations." Unpublished Dissertation, The University of Alberta.

Maier, N. R. F. and L. R. Hoffman. 1962. "Group Decision in England and the United States," **Personnel Psychology**, 15: 75-87.

Mansfield, R. 1973. "Bureaucracy and Centralization: An Examination of Organizational Structure," **Administrative Science Quarterly**, 18: 477-488.

March, J. G. and J. P. Olsen. 1976. **Ambiguity and Choice in Organizations**, Norway: Universitetsforlaget.

Maslow, A. H. 1954. **Motivation and Personality**, New York: Harper and Brothers.

Maurice, M. 1979. "For a Study of 'Social Effect': Universality and Specificity in Organization Research," in Lammers, C. J. and D. J. Hickson (eds.), **Organizations Alike and Unlike**, London: Routledge & Kegan Paul.

McMillan, C. J., D. J. Hickson, C. R. Hinings and R. E. Schneck. 1973. "The Structure of Work Organizations Across Societies," **Academy of Management Journal**, 16: 555-569.

Mead, R. D. 1967. "An Experimental Study of Leadership in India," **Journal of Social Psychology**, 72: 35-43.

Miles, R. E. and C. C. Snow. 1978. **Organizational Strategy, Structure and Process**, New York: McGraw Hill.

Mintzberg, H. 1979. **The Structuring of Organizations**, Englewood Cliffs, N.J.: Prentice Hall.

_____ 1980. "Structure in 5's: A Synthesis of the Research on Organization Design,"

Management Science, 26: 322-341.

Miskel, C., R. Fevurly and J. Stewart. 1979. "Organizational Structures and Processes, Perceived School Effectiveness, Loyalty and Job Satisfaction," **Educational Administration Quarterly**, 15: 97-118.

_____, J. Defrain and D. Wilcox. 1980. "A Test of Expectancy Work Motivation Theory in Educational Organizations," **Educational Administration Quarterly**, 16: 70-92.

Mohr, L. B. 1982. **Explaining Organizational Behavior**, San Francisco, Jossey-Bass Publishers.

Mouly, G. J. 1978. **Educational Research: The Art and Science of Educational Research**, Boston: Allyn and Bacon Inc.

Mumford, E. 1972. **Job Satisfaction: A Study of Computer Specialists**, London: Longmans.

Murphy, M. J., L. K. Bishop and J. R. George. 1975. "Defining Organizational Properties of Schools: A. Focus on Structure." Paper presented at the meeting of the American Educational Research Association, Washington, D.C. (April 1975.)

Negandhi, A. R. 1973. "Socio-Cultural Variables in Organizational Studies: A Critical Appraisal," in Negandhi, A. R. (ed.), **Modern Organizational Theory**, Ohio: Kent State University Press.

_____ 1983. "Cross-Cultural Management Research: Trend and Future Directions," **Journal of International Business Studies**, 14: 17-28.

Ng, S. H. 1982. "Choosing Between the Ranking and Rating Procedures for The Comparison of Values Across Cultures," **European Journal of Social Psychology**, 12: 169-172.

Organ, D. W. and C. N. Greene. 1981. "The Effect of Formalization on Professional Involvement: A Compensatory Process Approach," **Administrative Science Quarterly**, 26: 237-252.

Osborn, R. N. and J. G. Hunt. 1975. "Relations Between Leadership, Size and Subordinate Satisfaction in a Voluntary Organization," **Journal of Applied Psychology**, 60: 730-735.

Owens, R. G. 1982. "Methodological Rigor in Naturalistic Inquiry: Some Issues and Answers," **Educational Administration Quarterly**, 18: 1-21.

Parsons, T. 1973. "Culture and Social Systems Revisited," in Schneider, L. and C. M. Bonjean

(eds.), **The Idea of Culture in the Social Science**, Cambridge: Cambridge University Press.

Payne, R. and D. S. Pugh. 1976. "Organizational Structure and Climate," in Dunnette, M. D. (ed.), **Handbook of Industrial and Organizational Psychology**, Chicago: Rand McNally.

Pennings, J. 1973. "Measures of Organizational Structure: A Methodological Note," **American Journal of Sociology**, 79: 686-704.

Perkins, J. A. 1973. **The University As An Organization**, New York: McGraw Hill.

Perrow, C. 1970. "Technology and Structure." Working paper (Mimeograph), Madison: University of Wisconsin.

_____ 1970b. **Organizational Analysis: A Sociological Review**, Belmont, California: Brooks/Cole Publishing Company.

_____ 1972. **Organizational Analysis**, Belmont Cal.: Wadsworth Publishing Co.

Porter, L. W. 1961. "A study of Perceived Need Satisfaction in Bottom and Middle Management Jobs," **Journal of Applied Psychology**, 45: 1-10.

_____ 1962. "Job Attitudes in Management: Perceived Deficiencies in Need Fulfillment as a Function of Job Level," **Journal of Applied Psychology**, 46: 375-384.

_____ and E. E. Lawler. 1965. "Properties of Organization Structure in Relation to Job Attitude and Job Behavior, " **Psychological Bulletin**, 64: 23-52.

_____ and _____ 1976. "The Effects of Tall Versus Flat Organization Structures on Managerial Job Satisfaction," in Gruneberg, M. M. (ed.), **Job Satisfaction: A Reader**, London: McMillan Press.

Prasad, M. 1980. "Timely Reforms and Qualitative Improvement in Higher Education, **Education and Development**, Kathmandu: CERID, Tribhuvan University.

Pugh, D. S., D. J. Hickson, C. R. Hinings, K. M. Macdonald , C. Turner, and T. Lupton. 1963. "A Conceptual Scheme for Organizational Analysis," **Administrative Science Quarterly**, 8: 289-315.

_____, _____, _____ and C. Turner. 1968. "Dimensions of Organizational Structure," **Administrative Science Quarterly**, 13: 289-315.

_____, _____, _____ and _____. 1969. "The Context of Organization Structures," **Administrative Science Quarterly**, 14: 91-114.

_____, _____ and _____. 1969b. "An Empirical Texonomy of Structures of Work Organizations," **Administrative Science Quarterly**, 14: 115-126.

Radcliffe-Brown, A. R. 1957. **A Natural Science of Society**, Glencoe, Ill.: Free Press.

Rankin, W. L. and J. W. Grube. 1980. "A Comparison of Ranking and Rating Procedures for Value System Measurement," **European Journal of Social Psychology**, 10: 233-246.

Ranson, S., R. Hinings and R. Greenwood. 1980. "The Structuring of Organizational Structure," **Administrative Science Quarterly**, 25: 1-17.

Redding, S. G, and T. A. Martyn-Johns. 1979. "Paradigm Differences and Their Relation to Management With Reference to South-East Asia," in England. G. W., A. R. Negandhi and B. Wilpert (eds.), **Organizational Functioning in A Cross-Cultural Perspective**, Ohio: Kent State University.

Rice, A. W. 1978. "Individual and Work Variables Associated With Principal Job Satisfaction." Unpublished Dissertation, University of Alberta: Edmonton.

Richman, B. M. and R. N. Farmer. 1974. **Leadership, Goals, and Power in Higher Education**, San Francisco: Jossey-Bass Publishers.

Riley, P. 1983. "A Structurationist Account of Political Culture," **Administrative Science Quarterly**, 28: 414-437.

Roberts, K. H. 1970. "On Looking at an Elephant: An Evaluation of Cross-Cultural Research Related to Organizations," **Psychological Bulletin**, 74: 327-350.

Rohner, R. P. 1984. "Toward A Conception of Culture for Cross-Cultural Psychology," **Journal of Cross- Cultural Psychology**, 15: 111-138.

Rokeach, M. 1967. **Value Survey**, Sunnyvale, California: Halgren Tests (873 Persimmon Avenue, 94087).

_____ 1973. **The Nature of Human Value**, New York: Free Press.

Rummel, R. J. 1970. **Applied Factor Analysis**, Evanston: North-Western University Press.

Sathe, V. 1978. "Institutional Versus Questionnaire Measures of Organizational Structure," **Academy of Management Journal**, 21: 227-238.

Savage, M. H. 1981. "The Relationship of Teachers' Perceptions of Organizational Structure and Pupil Control Ideology to Teacher Alienation in New York City Public High Schools." Unpublished Dissertation: New York University.

Schein, E. H. 1984. "Culture as an Environmental Context for Careers," **Journal of Occupational Behavior**, 5: 71-81.

Scott, N. J. 1980. "The Relationship of Teachers' Perceptions of Organizational Structure and Decisional Participation to Dissatisfaction and Satisfaction in Public Alternative High Schools." Unpublished Dissertation, New York University.

Scott, R. W. 1981. **Organizations: Rational, Natural and Open Systems**, Engelwood Cliffs, N.J.: Prentice-Hall.

Sekaran, U. 1983. "Methodological and Theoretical Issues and Advancement in Cross-Cultural Research," **Journal of International Business Studies**, 14: 61-73.

Shrestha, K. N. 1980. **Educational Management in Nepal**, Kathmandu: Institute of Education, Tribhuvan University.

Singh, R. C. B. 1983. "The University Today," **Education and Development**, Kathmandu: CERID, Tribhuvan University.

Skakun, E., D. Precht and T. O. Maguire. 1970. "Orthogonal Factor Match," A computer program document published by the Division of Educational Research Services, University of Alberta.

Smircich, L. 1983. "Concepts of Culture and Organizational Analysis," **Administrative Science Quarterly**, 28: 339-358.

Smith, P. C., L. M. Kendall and C. L. Hulin. 1969. **The Measurement of Satisfaction in Work and Retirement**, Chicago: Rand McNally.

Sorge, A. 1983. "Cultured Organization," **International Studies of Management and Organization**, 12: 106-138.

_____ and M. Warner. 1981. "Culture Management and Manufacturing Organization: A Study of British and German Firms," **Management International Review**, 21: 35-47.

Sousa, D. A. and W. K. Hoy. 1981. "Bureaucratic Structure in Schools: A Refinement and Synthesis in Measurement," **Educational Administration Quarterly**, 17: 21-39.

Thompson, V. 1961. **Modern Organization**, New York: Knopf.

Travers, R. M. W. 1969. **An Introduction to Educational Research (3rd ed.)**, New York: McMillan.

Treece, E. W. and J. W. Treece. 1977. **Elements of Research in Nursing**, St. Louis: C. V. Mosby Company.

Udy, S. H. 1959. "Bureaucracy and Rationality in Weber's Organization Theory: An Empirical Study," **American Sociological Review**, 24: 789-798.

Van de Ven, A. H. 1976. "Equally Efficient Structural Variations within Organizations," in Kilmann, R. H., L. R. Pondy and D. P. Slevin (eds.), **The Management of Organization Design: Research and Methodology**, New York: North Holland.

_____ and D. L. Ferry. 1980. **Measuring and Assessing Organizations**, New York: John Wiley.

Van de Vijver and Y. H. Poortinga. 1982. "Cross-Cultural Generalization and Universality," **Journal of Cross-Cultural Psychology**, 13: 387-408.

Weick, C. 1976. "Educational Organizations as Loosely Coupled Systems," **Administrative Science Quarterly**, 21: 1-19.

_____. 1982. "Administering Education in Loosely Coupled Schools," **Phi Delta Kappan**, 63: 673-676.

Weiss, D. J., R. V. Dawis, G. W. England and L. H. Lofquist. 1967. **Manual for the Minnesota Satisfaction Questionnaire**, Minneapolis: Industrial Relation center, the University of Minnesota.

Welge, M. K. 1981. "A Comparison of Managerial Structure in German Subsidiaries in France, India, and the United States," **Management International Review**, 21: 5-21.

Willmott, H. 1981. "The Structuring of Organizational Structure: A Note," **Administrative Science Quarterly**, 26: 470-474.

Woodward, J. 1965. **Industrial Organization: Theory and Practice**, London: Oxford University

Press.

Zimmerman, D. 1971. "The Practicalities of Rule use," in Douglas, J. (ed.), **Understanding Everyday Life**, London: Routledge and Kegan Paul.

APPENDIX A

ORGANIZATIONAL SURVEY QUESTIONNAIRE

A Questionnaire Used in Alberta

Section I

In relation to your university, please indicate which decision making level (listed in column B) you feel has the greatest influence and/or authority over decisions listed in column A. In some decisions the level which exerts the greatest influence and/or authority may not be clear cut; you are asked to give your best estimates by circling the appropriate numeral in column B.

The levels listed in column B should be understood as follows:

Professor refers to individual faculty members.

Department includes all committees or councils which function at the department level.

Faculty includes all committees, councils and units which function at a faculty level.

University refers to all committees, councils and administrative units which function at the university-wide level.

The combined levels — Professor/Department, Department/Faculty and Faculty/University — indicate that the greatest influence and/or authority is exerted jointly by the two levels identified.

Column A	Column B						
	Decision making levels						
Decisions Concerning:	Professor	Prof./Dept.	Department	Dept./Fac.	Faculty	Fac./Univ.	University
1. the allocation of funds from University sources to a department,	1	2	3	4	5	6	7
2. the distribution of available resources among activities within a department,	1	2	3	4	5	6	7
3. the approval of a new academic program in a department,	1	2	3	4	5	6	7
4. the changes in general procedures for departmental operation,	1	2	3	4	5	6	7

Column A	Column B						
	Decision making levels						
Decisions Concerning:	Professor	Prof./Dept.	Department	Dept./Fac.	Faculty	Fac./Univ.	University
5. the areas of research in which a professor is involved,	1	2	3	4	5	6	7
6. course content, i.e. areas of subject matter, on which a course should focus,	1	2	3	4	5	6	7
7. final grades or marks students are assigned in a course,	1	2	3	4	5	6	7
8. selection of text and/or reference materials for a course,	1	2	3	4	5	6	7
9. admission of graduate students in a department,	1	2	3	4	5	6	7
10. selection of members to serve on departmental committees,	1	2	3	4	5	6	7
11. promotion of a faculty member,	1	2	3	4	5	6	7
12. selection of a new professor,	1	2	3	4	5	6	7
13. selection of the department chairman.	1	2	3	4	5	6	7

Section II

Please indicate how frequently the circumstance described in each of the following statements occurs in your work situation. Give your best estimates by circling the appropriate numeral.

	Never						Always
1. Professors know what level of work performance is expected.	1	2	3	4	5	6	7
2. The standard of performance on which each professor's work is evaluated is clearly specified.	1	2	3	4	5	6	7
3. A professor's work schedule in relation to areas such as office hours and when holidays are taken, is governed by prescribed rules.	1	2	3	4	5	6	7
4. Curriculum guidelines (course descriptions) specify instructional methods and sequence of topics a professor should follow in teaching a course.	1	2	3	4	5	6	7
5. Professors frequently feel that they are being watched to see that rules pertaining to the job are obeyed.	1	2	3	4	5	6	7
6. Sanctions for violating rules and procedures pertaining to a professor's job are severe.	1	2	3	4	5	6	7
7. The work of a professor is frequently supervised or evaluated to see that it measures up to prescribed standards.	1	2	3	4	5	6	7
8. When a professor is discovered violating a work related rule, severe sanctions are imposed.	1	2	3	4	5	6	7

Section III

A. The items which follow consist of a number of factors related to your job situation. For each statement please circle the numeral which you feel comes closest to describing your level of satisfaction.

How satisfied are you with:	Very Dissatisfied		Somewhat Dissatisfied		Somewhat Satisfied		Very Satisfied
1. the way your work is supervised.	1	2	3	4	5	6	7
2. the way academic and administrative policies are put into practice.	1	2	3	4	5	6	7
3. the way in which the rules are enforced.	1	2	3	4	5	6	7
4. the extent of your participation in the decision making process at the department level.	1	2	3	4	5	6	7
5. the amount of say or influence you have in university level decisions that affect you.	1	2	3	4	5	6	7
6. the amount of discretionary power you have in decisions concerning classroom teaching and research.	1	2	3	4	5	6	7
7. your freedom to introduce new ideas into the departmental activities.	1	2	3	4	5	6	7
8. the procedures under which your performance is evaluated.	1	2	3	4	5	6	7
9. the rules and standards applied in salary and promotion decisions.	1	2	3	4	5	6	7

B. The following questions refer to the overall job satisfaction. For each question please respond by circling the numeral which you feel comes closest to describing your level of satisfaction.

Considering all aspects of your work:	Very Dissatisfied		Somewhat Dissatisfied		Somewhat Satisfied		Very Satisfied
1. how satisfied are you with your job?	1	2	3	4	5	6	7
2. how satisfied are you with the general conditions under which you work?	1	2	3	4	5	6	7

Section IV

This section consists of a number of statements about which people probably have varying opinions. Please indicate (by circling the appropriate numeral) the extent to which you personally agree or disagree with each of these statements.

	Strongly Disagree						Strongly Agree
1. There is hardly any problem that can't be solved.	1	2	3	4	5	6	7
2. Respect for authority is a virtue youth must learn.	1	2	3	4	5	6	7
3. One who stands alone should be admired.	1	2	3	4	5	6	7
4. In a work situation what is to be done and how it is to be done should always be clearly specified.	1	2	3	4	5	6	7
5. In family matters decisions made by parents should not be questioned by the children.	1	2	3	4	5	6	7
6. Every person needs to be a non-conformist.	1	2	3	4	5	6	7
7. A job with which you are familiar is always preferable to what is unfamiliar.	1	2	3	4	5	6	7
8. Members of organizations should respect and follow the standards set by their leaders.	1	2	3	4	5	6	7
9. Individuals should be prepared to compromise with colleagues in order to achieve consensus.	1	2	3	4	5	6	7
10. Members of an organization should strive to acquire similar values and ideals.	1	2	3	4	5	6	7
11. Laws should not be defied even if there is some doubt as to their validity.	1	2	3	4	5	6	7

	Strongly Disagree						Strongly Agree
12. Personal growth and achievement should be the major goal in one's life.	1	2	3	4	5	6	7
13. It is difficult to enjoy a social gathering where most of the people are strangers.	1	2	3	4	5	6	7
14. Every member of society should strive to maintain the established social standards.	1	2	3	4	5	6	7
15. Members of an organization should have limited involvement in each other's life and problems.	1	2	3	4	5	6	7
16. Those who lead routine and predictable life styles miss most of the joy of living.	1	2	3	4	5	6	7
17. Sanctions imposed by society on those who violate established standards are not as severe as they should be.	1	2	3	4	5	6	7
18. To be superior a person must stand alone.	1	2	3	4	5	6	7
19. It is more fun to tackle a complicated problem than to solve a simple one.	1	2	3	4	5	6	7
20. Discipline and loyalty are the most important qualities of a good citizen.	1	2	3	4	5	6	7
21. The pursuit of individual interests is ethical as long as no one is harmed.	1	2	3	4	5	6	7
22. One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting.	1	2	3	4	5	6	7

		Strongly Disagree						Strongly Agree
23.	What a member of an organization needs most is strict discipline.	1	2	3	4	5	6	7
24.	In life a person should "go it alone", working on his/her own and trying to make his/her own decisions.	1	2	3	4	5	6	7
25.	People should not take risks even if the awards appear to be attractive.	1	2	3	4	5	6	7
26.	When one stops respecting authority his/her situation isn't worth much.	1	2	3	4	5	6	7
27.	One should not depend on others.	1	2	3	4	5	6	7
28.	Differences in opinion (or conflicting ideas) within organizations do more harm than good.	1	2	3	4	5	6	7
29.	Young people have to get over rebellious ideas and settle down as they grow up.	1	2	3	4	5	6	7
30.	Individual interests should come secondary to the welfare of the group.	1	2	3	4	5	6	7
31.	In today's organizations activities should be governed by clearly specified rules and procedures.	1	2	3	4	5	6	7
32.	If it were not for the rebellious ideas of youth there would be less progress in the world.	1	2	3	4	5	6	7

Section V

The following questions are designed to obtain information about your personal and professional background. Please answer the questions by circling the appropriate numeral.

Please indicate your age.

Under 30	30-39	40-49	50-59	60 +
1	2	3	4	5

How many years have you been working in this university?

Less Than 5	5-9	10-14	15-19	More Than 20
1	2	3	4	5

Please indicate the faculty where you work.

Arts	Education	Business	Science
1	2	3	4

What is your current rank?

Assistant Professor	Associate Professor	Professor
1	2	3

NB - Please check to make sure that you have responded to every item of the questionnaire.

By using the campus mail, please return the completed questionnaire to the following address:

APPENDIX B

ORGANIZATIONAL SURVEY QUESTIONNAIRE

A Questionnaire Used in Nepal

Section 1

In relation to your university, please indicate which decision making level (listed in columnB) you feel has the greatest influence and/or authority over decisions listed in column A. In some decisions the level which exerts the greatest influence and/or authority may not be clearcut; you are asked to give your best estimates by circling the appropriate numeral in column B.

The levels listed in column B should be understood as follows:

Teacher refers to individual teaching staff of a campus.

Campus includes all committees or councils which function in a campus.

Dean's office includes all committees, councils and units which function at a institute level

Central office refers to all committees, councils and administrative units which function at the university—wide level.

The combined levels—Teacher/Campus, Campus/Dean's office and Dean's office/Central office—indicate that the greatest influence and/or authority is exerted jointly by the two levels identified.

Column A	Column B: Decision making levels						
Decisions Concerning:	Teacher	Teacher/Campus	Campus	Campus/Dean's office	Dean's office	Dean's office/Central office	Central office
1. the allocation of funds from university sources to a campus,	1	2	3	4	5	6	7
2. the distribution of available resources among activities within a campus.	1	2	3	4	5	6	7
3. the approval of a new academic program in a campus	1	2	3	4	5	6	7
4. the changes in general procedures for campus operation	1	2	3	4	5	6	7

Column A	Column B						
	Decision making levels						
Decisions Concerning;	Teacher	Teacher/campus	Campus	Campus/Dean's Office	Dean's Office	Dean's Office/ Central Office	Central Office
5. the areas of research in which a teacher is involved,	1	2	3	4	5	6	7
6. course content, i.e. areas of subject matter, on which a course should focus,	1	2	3	4	5	6	7
7. final grades or marks students are assigned in a course,	1	2	3	4	5	6	7
8. Selection of text and/or reference materials for a course	1	2	3	4	5	6	7
9. admission of students in a campus,	1	2	3	4	5	6	7
10. selection of members to serve on different committees within the campus,	1	2	3	4	5	6	7
11. promotion of a teacher,	1	2	3	4	5	6	7
12. selection of a new teacher,	1	2	3	4	5	6	7
13. selection of a campus chief,	1	2	3	4	5	6	7

Section II

please indicate how frequently the circumstance described in each of the following statements occurs in your work situation. Give your best estimates by circling the appropriate numeral.

	Never						Always
1. Teachers know what level of work performance is expected.	1	2	3	4	5	6	7
2. The standard of performance on which each teacher's work is evaluated is clearly specified.	1	2	3	4	5	6	7
3. A teacher's work schedule in relation to areas such as office hours and when holidays are taken, is governed by prescribed rules.	1	2	3	4	5	6	7
4. Curriculum guidelines (course descriptions) specify instructional methods and sequence of topics a teacher should follow in teaching a course.	1	2	3	4	5	6	7
5. Teachers frequently feel that they are being watched to see that rules pertaining to the job are obeyed.	1	2	3	4	5	6	7
6 Sanctions for violating rules and procedures pertaining to a teacher's job are severe.	1	2	3	4	5	6	7
7 The work of a teacher is frequently supervised or evaluated to see that it measures up to prescribed standards.	1	2	3	4	5	6	7
8. When a teacher is discovered violating a work related rule, severe sanctions are imposed	1	2	3	4	5	6	7

Section III

A. The items which follow consist of a number of factors related to your job situation. For each statement please circle the numeral which you feel comes closest to describing your level of satisfaction.

How satisfied are you with:	Very Dissatisfied		Somewhat Dissatisfied		Somewhat Satisfied		Very Satisfied
1. the way your work is supervised.	1	2	3	4	5	6	7
2. the way academic and administrative policies are put into practice.	1	2	3	4	5	6	7
3. the way in which the rules are enforced.	1	2	3	4	5	6	7
4. the extent of your participation in the decision making process at the campus level.	1	2	3	4	5	6	7
5. the amount of say or influence you have in central office level decisions that affect you.	1	2	3	4	5	6	7
6 the amount of discretionary power you have in decisions concerning classroom teaching and/or research.	1	2	3	4	5	6	7
7 your freedom to introduce new ideas into the campus activities.	1	2	3	4	5	6	7
8. the procedures under which your performance is evaluated.	1	2	3	4	5	6	7
9. the rules and standards applied in salary and promotion decisions.	1	2	3	4	5	6	7

B. The following questions refer to the overall job satisfaction. For each question please respond by circling the numeral which you feel comes closest to describing your level of satisfaction.

Considering all aspects of your work;	Very Dissatisfied		Somewhat Dissatisfied		Somewhat Satisfied		Very Satisfied
1. how satisfied are you with your job ?	1	2	3	4	5	6	7
2. how satisfied are you with the general conditions under which you work ?	1	2	3	4	5	6	7

Section IV

This section consists of a number of statements about which people probably have varying opinions. Please indicate (by circling the appropriate numeral) the extent to which you personally agree or disagree with each of these statements.

	Strongly Disagree						Strongly Agree
1. There is hardly any problem that can't be solved.	1	2	3	4	5	6	7
2. Respect for authority is a virtue youth must learn.	1	2	3	4	5	6	7
3. One who stands alone should be admired.	1	2	3	4	5	6	7
4. In a work situation what is to be done and how it is to be done should always be clearly specified.	1	2	3	4	5	6	7
5. In family matters decisions made by parents should not be questioned by the children.	1	2	3	4	5	6	7
6. Every person needs to be a non-conformist.	1	2	3	4	5	6	7
7 A job with which you are familiar is always preferable to what is unfamiliar.	1	2	3	4	5	6	7
8. Members of organizations should respect and follow the standards set by their leaders	1	2	3	4	5	6	7
9. Individuals should be prepared to compromise with colleagues in order to achieve consensus.	1	2	3	4	5	6	7
10. Members of an organization should strive to acquire similar values and ideals.	1	2	3	4	5	6	7
11. Laws should not be defied even if there is some doubt as to their validity.	1	2	3	4	5	6	7

		Strongly Disagree						Strongly Agree
12.	Personal growth and achievement should be the major goal in one's life.	1	2	3	4	5	6	7
13.	It is difficult to enjoy a social gathering where most of the people are strangers.	1	2	3	4	5	6	7
14.	Every member of society should strive to maintain the established social standards.	1	2	3	4	5	6	7
15.	Members of an organization should have limited involvement in each other's life and problems.	1	2	3	4	5	6	7
16.	Those who lead routine and predictable life styles miss most of the joy of living.	1	2	3	4	5	6	7
17.	Sanctions imposed by society on those who violate established standards are not as severe as they should be.	1	2	3	4	5	6	7
18.	To be superior a person must stand alone	1	2	3	4	5	6	7
19.	It is more fun to tackle a complicated problem than to solve a simple one	1	2	3	4	5	6	7
20.	Discipline and loyalty are the most important qualities of a good citizen	1	2	3	4	5	6	7
21.	The pursuit of individual interests is ethical as long as no one is harmed.	1	2	3	4	5	6	7
22	One should join in an organization committed to providing lifelong employment even if the job itself may not be very interesting.	1	2	3	4	5	6	7

		Strongly Disagree						Strongly Agree
23.	What a member of an organization needs most is strict discipline.	1	2	3	4	5	6	7
24.	In life a person should "go it alone" working on his/her own and trying to make his/her own decisions.	1	2	3	4	5	6	7
25.	People should not take risks even if the awards appear to be attractive.	1	2	3	4	5	6	7
26.	When one stops respecting authority his/her situation isn't worth much.	1	2	3	4	5	6	7
27.	One should not depend on others.	1	2	3	4	5	6	7
28.	Differences in opinion (or conflicting ideas) within organizations do more harm than good.	1	2	3	4	5	6	7
29.	Young people have to get over rebellious ideas and settle down as they grow up.	1	2	3	4	5	6	7
30.	Individual interests should come secondary to the welfare of the group.	1	2	3	4	5	6	7
31.	In today's organizations activities should be governed by clearly specified rules and procedures.	1	2	3	4	5	6	7
32.	If it were not for the rebellious ideas of youth there would be less progress in the world.	1	2	3	4	5	6	7

Section v

The following questions are designed to obtain information about your personal and professional background. Please answer the questions by circling the appropriate numeral.

	Uber 30	30-39	40-49	50-59	60 +
Please indicate your age.	1	2	3	4	5

	Less Than 5	5-9	01-14	15-19	More Than 20
How many years have you been working in this university ?	1	2	3	4	5

	Humanities & Social sc.	Education	Commerce	Science
please indicate the faculty where you work.	1	2	3	4

	Assistant lecturer	Lecturer	Reader	professor
What is your current rank ?	1	2	3	4

NB - Please check to make sure that you have responded to every item of the questionnaire

APPENDIX C

LETTERS TO RESPONDENTS

INTER-DEPARTMENTAL CORRESPONDENCE 224

TO _ _ _ _ _ _ _ _ _ _

DATE January 4, 198[redacted]

FROM Madhav Mainali Madhav f : mk

I am a graduate student in the Department of Educational Administration. For my thesis I am undertaking a study which attempts to analyze the characteristics of university organizations across Canadian and Nepalese cultures. The primary source of data for the study will be the responses of university professors, in Canada and Nepal, to a series of questionnaire items.

The questionnaire is enclosed. I would be very grateful if you could complete the questionnaire and return it to me by mid- January. For your convenience an addressed envelope is also enclosed.

If you have any questions about the study please feel free to telephone me at 432-4909 or my adviser Dr. E. Miklos, at 432-3751. Thank you for your assistance.

DEPARTMENT OF
EDUCATIONAL ADMINISTRATION
FACULTY OF EDUCATION
THE UNIVERSITY OF ALBERTA

January 24, 1984

To .....

.....

..... Campus

Tribhuvan University, Nepal

I am a graduate student in the Department of Educational Administration, the University of Alberta. For my doctoral thesis I am undertaking a study which attempts to analyse organizational characteristics in cross-cultural settings. For this analysis data will be drawn from two universities -- the University of Alberta, Canada, and Tribhuvan University.

The primary source of data for the study will be the responses of professors to a series of questionnaire items. I would be very grateful if you could complete the enclosed questionnaire and return it to me by mid-February. For your convenience an addressed envelope is also enclosed.

If you have any questions about the study please feel free to telephone me at 14048 (Kathmandu). Thank you for your assistance.

Sincerely,

Madhav Mainali

Madhav P. Mainali
15/36 Pakanajol
Kathmandu, NEPAL

7-104, EDUCATION NORTH, EDMONTON, ALBERTA, CANADA T6G 2G5 TELEPHONE (403) 432-5241

APPENDIX D

RESULTS OF ONE-WAY ANALYSIS OF VARIANCE

Table D.1

Results of One-Way Analysis of Variance of Conformity Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	87	3.40	0.74	0.53	None
	2. Education	57	3.41	0.90		
	3. Business	28	3.20	0.70		
	4. Science	84	3.36	0.90		
Nepalese	1. Arts	66	5.32	0.91	0.45	None
	2. Education	47	5.45	1.06		
	3. Business	41	5.40	0.67		
	4. Science	47	5.50	0.90		

Higher mean value indicates greater conformity.

Table D.2

Results of One-Way Analysis of Variance of Individualism Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	87	4.42	0.80	2.88*	None
	2. Education	57	4.10	0.62		
	3. Business	28	4.56	0.86		
	4. Science	84	4.41	0.87		
Nepalese	1. Arts	67	3.84	1.36	1.80	None
	2. Education	47	3.40	1.12		
	3. Business	43	3.40	1.17		
	4. Science	47	3.52	1.30		

* significant beyond 0.05 level.

Higher mean value indicates greater orientation toward individualism.

Table D.3

Results of One-Way Analysis of Variance of Tolerance for Uncertainty Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	86	5.30	0.98	1.85	None
	2. Education	59	5.36	1.00		
	3. Business	29	5.39	1.00		
	4. Science	84	5.63	0.91		
Nepalese	1. Arts	66	3.30	1.70	0.96	None
	2. Education	47	2.98	1.34		
	3. Business	41	2.97	1.30		
	4. Science	47	2.99	1.25		

Higher mean value indicates greater tolerance for uncertainty.

Table D.4

Results of One-Way Analysis of Variance of Formalization of Organizational Activities Classified by University Faculties in Alberta and Nepalese Samples

Sample	Faculty	N	Mean	S.D.	F	Significantly Different Faculties
Alberta	1. Arts	86	3.47	0.74	1.73	None
	2. Education	59	3.21	0.79		
	3. Business	29	3.20	0.75		
	4. Science	84	3.32	0.78		
Nepalese	1. Arts	67	5.14	0.87	0.11	None
	2. Education	48	5.10	1.00		
	3. Business	45	5.17	0.92		
	4. Science	47	5.16	0.81		

Higher mean value indicates greater formalization experienced by a faculty.